An Address
ON THE
ANTISEPTIC TREATMENT OF DISEASES OF THE LUNGS.

Delivered at the Inaugural Meeting of the West London Medico-Chirurgical Society.

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GENTLEMEN,—When your secretary, Mr. Keetley, did me the honour of inviting me to bring before this Society the subject of the Antiseptic Treatment of Pulmonary Diseases, I confess I at first hesitated to accept that invitation. I felt that although I had given some attention to the subject, my time was at this moment so fully occupied, that I should not be able to deal with the subject so fully and completely as its importance merited, or as was due to a Society so learned and influential as yours. I also felt that it was a subject which was only just beginning to be looked at from something like a firm scientific standpoint, and that from this point of view the question of the antiseptic treatment of diseases of the lungs was in its initial stage, a stage certainly full of suggestions for future investigation, but the work of examination, of experiment, of comparison, of testing, and of criticism—serious, helpful criticism,—for the most part had yet to be gone through. It might then, I thought, seem premature to introduce this subject to this Society for discussion in its present stage; but when I reflected on the intrinsic importance of the subject itself, when I thought of the vast interests, direct and collateral, involved in its discussion, and of the power and influence the members of such a Society as this would possess in collecting evidence bearing upon it, I yielded to your secretary's request, relying on your kind indulgence to excuse the merely suggestive character of this address and the many shortcomings and defects which future research alone can supply. It is remarkable when we begin to look into the history of almost any subject, how little there is that is new in its facts and its phenomena. What is new resides in our mode of regarding them, our comprehension of them, our application of them. The truth is always there in the facts and phenomena of Nature, but it is often only discovered after ages of observation, of experiment, and of opposition. Of opposition: how remarkable is this spirit of opposition! how remarkable has it been in the history of one of the latest and greatest triumphs and discoveries in the art and science of surgery, the antiseptic system. As if the work of discovering truth in this universe was not hard enough, men are perpetually encountering from their fellow-men the most ardent opposition in this task. In proof of what I say I need only point to the present agitation on the part of a well-known Society against all experiments on animals—a Society which, reversing the exclamation of the dying Goethe for "more light," might be fittingly designated "The Society for the Maintenance of Darkness."

The idea of an antiseptic treatment of pulmonary diseases is certainly *new* in our present mode of regarding it, in our comprehension of the phenomena with which it is concerned, and in the extended application which we propose to give to it. But the thing itself is not new, the phenomena are not new. The adoption and the success of antiseptic methods of treatment of pulmonary affections have been recorded again and again, and they have, again and again, met with opposition, and not rarely with a sort of sneering contempt. This, gentlemen, you may be satisfied will never be the case again, and for the following reason. Hitherto, or till quite lately, such efforts were empirical, and without any strictly scientific basis, but now our antiseptic methods are founded on scientific knowledge—on principles, principles that have been evolved from a series of most patient and at the same time most fruitful investigations, which will go far to make this latter half of the nineteenth century the most illustrious in the history of medical science. A very few historical illustrations will suffice to prove what I have said about the antiquity of the fact of the antiseptic treatment of pulmonary affections. Hippocrates and Galen used to advise the inhalation of balsamic vapours in pulmonary affections, and the latter used to recommend phthisical patients to settle in the vicinity of Vesuvius and Etna, where they could inhale sulphurous vapours as well as sea air. But we will confine ourselves to the history of pulmonary therapeutics during the last hundred years, and one of the most noticeable facts in this period is the frequency with which tar vapour has been advocated as of great value in the treatment of lung diseases. Dr. Rush of Philadelphia in 1787, Dr. Beddoes in this country about the same time, and Sir Alexander Crichton in 1817, all stated that they had met with great success in treating cases of phthisis by inhalation of the vapour of boiling tar, and Dr. Solis Cohen, in his excellent book on "Inhalations" in connexion with this testimony, says: "The use of tar vapours in phthisis deserves to be fully and systematically studied, so that safe indications may be laid down as to the character of cases to which it is most applicable." Between 1819 and 1830 the French physicians Gannal and Cottereau, and Sir James Murray in this country, reported excellent results from the treatment of cases of phthisis with dilute chlorine vapour. One of these had noticed that the workmen in bleaching factories with chest disease visibly improved, and another reported thirteen cases of phthisis cured by inhalation of chlorine, and Louis in Paris, and Dr. Elliotson and A. T. Thompson in London, spoke well of it.

In 1835 Sir Chas. Scudamore became an enthusiastic advocate for the inhalation of iodine vapours in phthisis, and after ten years' experience of its use he expressed himself as convinced of its remedial power. Piorry (between 1850 and 1860) also was an advocate for the continuous inhalation of iodine vapour in phthisis, and for this purpose he used to have several saucers containing iodine placed about the patient's pillow. He treated thirty-one patients in this way for two years; twenty were decidedly benefited, both as regards symptoms and physical signs; in seven cases both symptoms and physical signs disappeared, and four cases died. Later still Skoda used inhalations of the vapour of turpentine with much success in phthisis, pulmonary gangrene, and in catarrhal affections of the air passages.

I have selected these few illustrations almost at random from the history of pulmonary therapeutics to prove to you that I was right in saying that there is nothing new in the facts, and they also go towards disproving the statement that I have lately seen made by one or two writers in the journals of the small amount of success that has attended the antiseptic treatment of phthisis.[1] I suppose I have as much right to speak on this subject as any of those writers, for during ten years I saw personally over 27,000 applicants in a hospital devoted to the treatment of this affection, and of all the methods of treatment of which I have had any knowledge or experience, those into which some antiseptic measure entered as an important element were certainly attended with the best results. The difficulty, however, always was to secure anything like a proper application of an antiseptic agent; and after trying various devices for this purpose, I at length devised a very simple method of continuous inhalation, which answers the purpose better than any other with which I am acquainted. I have described this elsewhere,[2] and you can examine the specimens of the little apparatus I have devised for this purpose that are on the table.

Let me here make a remark which as practical men you will at once see the force of. It is useless to attempt to test any method of treatment by applying it to cases of advanced phthisis. In such cases the mischief is done. No antiseptic agent will cause numerous suppurating cavities to close up and heal, or replace lung tissue that has been destroyed by progressive ulceration and disintegration, or remove extensively disseminated tubercular and inflammatory infiltrations. And yet how many cases of phthisis come before us already in this state. It is greatly to be regretted that certain physicians should ever have pretended to have cured such cases, and that others should seriously have tested their statements by the application of any special method of treatment to cases so advanced and so hopeless. In order that any case may be cured by any method of treatment the first and essential condition is that it should be curable. And cases of phthisis too often come for the first time under our observation long after the possibility of cure is passed.

[1] In my recently published Lectures on Consumption I have collected a mass of contemporary testimony in favour of this treatment.
[2] Lectures on Consumption. London: J. & A. Churchill.

But the question for us to examine and to satisfy ourselves about now is this, Is an antiseptic system of treatment applied to lung diseases true in principle? If we can convince ourselves that the principle is a true one, modes of application and developments in practice will be certain to follow. In the first place, then, let us inquire, What is antiseptic treatment? Antiseptic treatment applied to the lungs is one or both of two things: First, it is the prevention of a hurtful, poisonous (septic) agent getting to the lungs from without; and, secondly, it is the destruction, or the limitation of the action of a hurtful poisonous (septic) agent already within them.

And now let us ask ourselves if there is any *à priori* reason why it should not be possible to satisfy both these indications. It was argued warmly not many years ago, as a necessary preliminary to this discussion, that it was impossible to bring medicinal agents into contact with the pulmonary surface by inhalation. That argument has been abundantly disproved by the most varied and elaborate experimental investigations.[3]

So, then, supposing a hurtful septic agent to exist in the lungs—and in phthisis the presence of such an agent has been demonstrated beyond all question, and its virulently septic quality established—the problem of the antiseptic treatment is this: Do we possess, or can we discover, any agent which we can convey, in the form of gas, vapour, or solution into the lungs which shall be inimical to the life and activity of this septic body? Or can we place our patient under any possible conditions of life which shall prove hostile to its growth and development? It would be illogical and absurd in the extreme to deny the possibility of such a method, or of the discovery of such an antiseptic agent, if we do not already possess one or more. The second indication must therefore be admitted to be quite possible. Now, let us turn to the first indication. It is not only necessary to destroy any septic agent that may be already in the lungs, but we must be able to prevent septic agents from entering them with the respired air. Now, this may be accomplished in two ways: (1) We may place our patient in an atmosphere which by examination we know to be absolutely pure and free from septic particles; or (2) we may diffuse through the air he breathes an agent hostile to the life and activity of any septic particles there may be in it. This, again, is a true antiseptic treatment, and it is certainly possible in either of these two forms. If then we limit ourselves (which we had better do on this occasion) to the consideration of the treatment of phthisis, we have two things satisfactorily proved. First, there does exist a hurtful specific septic agent in the lungs. Second, an antiseptic treatment is possible. There is no beating the air in this. Gentlemen, we are here on sure and certain footing; we have reached a principle. This is only the first stone of the edifice we have to build, but it is the foundation stone. The next thing for us to do is, by patient labour in the way of observation and experiment, to apply this principle. Our object is to discover what agents there may be within our reach capable of being administered without inflicting injury to the pulmonary tissues, which may have the power of destroying, or neutralising, or arresting the activity of the septic organism, which seems to be the operative cause in the origin and propagation of phthisis. I am disposed to believe that other common forms of disease of the respiratory organs have a septic origin also, and call for antiseptic treatment, but we must for the present concentrate our attention on this subject of phthisis.

Already we have abundant and incontestable proof that pure air—pure, cool dry air, in unlimited amount—is such an antiseptic agent. Wherever such air is found—on the high table-land of Mexico, in the elevated valleys of Switzerland, on the Kirghiz steppes of Asiatic Russia, in the pine forests of Central Germany, and on the open sea—wherever men live a life in the open air, away from the emanations of cities, and from too close contact with humanity,—in all such places we hear of consumption becoming arrested and cured. The bacillus tuberculosis seems to love hot, moist air, and air freely charged with the exhalations of humanity; warmth and moisture seem to provoke it into special activity, while dry air at a comparatively low temperature seems to be inimical to it. Whoever has watched, as I have done, a large number of cases of phthisis in this country, must have been struck with the frequent occurrence of rapid advances in the disease during the first warm moist days of spring and early summer.

And here again I am tempted to quote a passage to which my attention has been recently called by my friend, Dr. Frank of Cannes, to show how true it is that the facts we are discussing are not new. It occurs in a very able book by a German writer, "Hausrath on New Testament Times," an English translation of which has been published by Williams and Norgate. He is alluding to the mountain air of the fortress of Masada, a mountain fortress on the borders of the Dead Sea, where John the Baptist was imprisoned. There, he says, Josephus tells us provisions retained their freshness for over 100 years "because the air at the altitude of the fortress was purified from all earthly and corrupt particles!" It is precisely such air—air purified from all "corrupt particles"—that we require for our phthisical patients; and if we cannot send them where such air is naturally found, we must artificially create for them an antiseptic atmosphere which they can breathe where they are; and if we are to perpetuate consumption hospitals, it is with such an atmosphere we must fill them. But the time will probably come when instead of crowding a number of consumptive patients together in the centre of a populous district of a crowded city, we shall acquire for the same purpose a good-sized pine wood with a dry subsoil a few hundred feet above the sea-level, and build a certain number of scattered cottages through the wood, and hang up a number of hammocks between the fir trees and send our consumptive patients there to be aired into health! In wet weather they would make up fires of fir wood and pine cones, and so fill their cottages with balsamic and antiseptic vapours; and with open windows and a dry soil they would find the wet weather less injurious to them there than in towns. But we have other antiseptic resources more manageable than a pine wood. And here let me call your attention to the peculiar anatomical conditions of the respiratory organs, by which they are rendered peculiarly prone to septic attack, and specially needing of antiseptic defence. The lung is the only deep-seated internal organ in the body which is freely accessible to the surrounding air. Perpetually the outer air is passing in and out of the lung, and thus septic particles in the air can readily reach the pulmonary surface, which is most richly supplied with absorbent vessels. But if, owing to the anatomical disposition of the parts of the lung septic bodies can readily reach it from without, for the same reason antiseptic particles can also be readily brought into contact with it, either in the form of gas, or vapour, or fine spray and mist, or even fine solid particles.

It is needless to offer you any proof of this. You will, I take it, all accept this statement as proved; and you are no doubt familiar with various forms of apparatus devised for the purpose of carrying out such applications. But though we may sterilise or destroy in this way such germs or microbes as may commonly occur in the surrounding atmosphere, and so purify and render harmless the air that passes in and out of the lungs in respiration, it does not follow that the agents we now know to be germicides, such as carbolic acid, eucalyptol, thymol, &c., and which are used by surgeons on account of that property, are necessarily destructive of the tubercle bacillus. Analogy would lead us to conclude they might be, and the experience of their use in the hands of many competent observers,[4] tends to strengthen this view. But we must not rest satisfied with this; we must pursue our studies of the life-history of the tubercle bacillus until we have discovered what is the particular agent or agents which are especially inimical to its development and activity.

There is another difficulty which we must be prepared to encounter—the difficulty of inducing patients to submit to a continuous process of disinfection. It is by no means easy to induce phthisical patients to wear, almost continuously, even so light and simple an appliance as the one I have shown you, and it would be infinitely more difficult to get them to inhale a spray for many hours a day, supposing it should be discovered that the best antiseptic is soluble in water but not vapourisable at ordinary temperatures, as was the case with the benzoate of soda of which so much was expected by some. But I believe this difficulty would almost entirely disappear if our knowledge became absolutely precise, and our confidence in our remedy completely assured. If we could say to our patients "by this means you will be cured,

[3] Vide Oertel: Respirator'schen Therapie.

[4] Lectures on Consumption, Appendix to Lecture 2.

and by no other," this difficulty would, I am persuaded, almost cease to exist. Hence, however, we see the obvious advantage of being able to remove our patients to an antiseptic atmosphere where they cannot help inhaling the curative agent continuously.

And now I must bring these merely suggestive observations to a close. In the foregoing remarks I have chiefly endeavoured to show that the idea of an antiseptic treatment of lung diseases is based on scientific data, and that in principle it is established as a truth. What lies before us is to overcome the difficulties in its application. We should be encouraged in this work by the thought that whatever progress we are enabled to make we shall be furthering the labours of the great experimental pathologists of our times, the labours of men like Pasteur, Koch, and Lister. It is not given to everyone to be enabled to work with a genius and an energy like theirs. But let me remind you that one of them—Koch—was a country doctor, a general practitioner, like many who are here to-night; and we may all do something towards transferring the influence of their intelligence and their genius, and in applying the fruits of their labours to the practical daily duty of healing the sick; and in spite of much disingenuous misinterpretation and foolish abuse we may be able to prove to the world that experimental pathology is in the very highest degree beneficent and philanthropic. For the first time we seem to have grasped a principle in the treatment, both preventive and curative, of a class of diseases which we have hitherto regarded almost with despair. Let us steadily work on the foundation which this principle supplies, the successful application of which must be attended with immense service to humanity and lasting honour to medical science.

Introductory Address

DELIVERED AT

UNIVERSITY COLLEGE, LONDON,

On the Opening of the Winter Session of 1882.

BY MARCUS BECK, M.S., F.R.C.S.

(Concluded from page 561.)

THUS, then, we have a large number of our students started on their medical education badly, and the consequence is that they spend a great part of their first year of study in learning how to learn, and doing that imperfectly. From want of training in generalisation and classification, their knowledge consists merely of a mass of disconnected details, and the strain upon the memory becomes correspondingly great. A thorough and clear comprehension of a subject is essential for its easy acquirement; and without some knowledge of chemistry and physics it is impossible to understand a great part not only of physiology, but of medicine and surgery also. The evil habit of thought which is cultivated by this irregular training in the early part of study frequently persists throughout the whole course, and the difficulty experienced by the student in passing the primary examination is exaggerated in the final, as that includes no subject like anatomy, in which mere memory is of more value than logical thought.

In order to obtain a double qualification, however, the student has to present himself for this examination at the College of Physicians or the Apothecaries' Hall, and it is very common for this to be done after the College of Surgeons is finished. Consequently we often find him preparing for examination in chemistry and botany some two or three years after he attended the classes on these subjects, and at a time when it is too late for him to derive that mental training from them which should have assisted him in his course of study. Some effort to remedy this evil has of late been made by the College of Physicians by the institution of the new examination to be passed at any time after registration. This, no doubt, is a step in the right direction, in so far as it encourages the student to pass his chemistry and botany at as early a period as possible of his medical study. But, on the other hand, it seems to be specially designed to encourage him to spend some time in a sort of modified apprenticeship before commencing his work at a medical school. Now if the object were to re-establish the old prescribing druggist, as he was before the apothecary developed into the general practitioner, nothing could be better; but if the future licentiates of the College of Physicians are to be educated as men of science, the introduction of a period of desultory work without any proper teaching between school and college can do nothing but harm. The botany also, which he is to learn, is defined as medical botany. Now the only justification for retaining botany in the early part of a medical curriculum is, that of all subjects it gives the best training in the accurate observation of simple facts and in classification, and unless it is taught as a science with this object, quite irrespective of its supposed utility in medicine, it might just as well be omitted altogether. Although, therefore, the examination is doubtless a relief to the student, by enabling him to get rid of some troublesome subjects during his first year, it is not likely to do much to improve his training from a scientific point of view, and I believe it is only by an improved training that we shall be able to diminish the lamentable proportion of rejections which forms almost a reproach to our medical teaching. Up to the present time, however, the attempt to meet the higher standard required at the examining boards has been chiefly by increased quantity of teaching, and at the same time the mode of teaching has become more practical and demonstrative. At the time I was a student here there were no demonstration classes in anatomy, the class of practical physiology had not been instituted, and there was no class of practical zoology. Voluntary classes in operative surgery and bandaging existed; but the practical surgery class, as we now have it, was not founded till ten years later. At the hospital the only practical instruction given in surgery was the bedside teaching, supplemented by a few clinical lectures, rather theoretical than practical. In the medical wards students wrote reports on cases which were corrected by the professor of clinical medicine, but no classes had been instituted for practical instruction in the rudiments of medical diagnosis. Now we have changed all this, and practical classes crowd upon each other till it becomes almost impossible to find time for them all in the nine hours of the day during which the college and hospital are open. The practical classes in medicine and surgery have no doubt become necessary to replace the teaching that the student formerly received during his apprenticeship; but in other subjects they have been instituted solely with the view of improving the quality of the teaching, and enabling the student to reach the higher standard of knowledge required of him. The result so far, however, has not been to diminish the number of rejections. These still continue in unabated numbers, and will continue, I believe, as long as the present irregular system of education is followed by so large a number of our students. While we expect students to understand the most complicated mechanism in creation without a knowledge of mechanics, to understand the eye and ear without optics or acoustics, or respiration without knowing the laws of atmospheric pressure; while we expect him to understand the chemistry of digestion almost before he knows the difference between an element and a compound, I do not think we can hope for any real improvement in the results of the examinations. It is, I believe, only by a better preparation in science, and by a rearrangement of medical examinations in accordance with the laws of scientific education, so as to train the student to think, and to think well, that we can hope to get any real improvement. To this course, however, many objections have been raised on the grounds that it would add more subjects to the medical curriculum, which, in the opinion of some, already includes more than are necessary; that it would lengthen the period of medical study, and would add another examination to those with which the student is already burdened. Finally, there are some still to be found who deny the utility of science and the value of mental training.

To take these objections in order. First, that it would add another subject to the medical curriculum. I have before said that zoology, although forming an extremely valuable training for those who have time to avail themselves of it, is not essential, and there would be nothing to justify adding it to the ordinary course of medical study. Physics would therefore be the only subject which would be added to those already in the curriculum. Now at the present time, students are expected to know at their examinations all those parts of natural philosophy which apply to physiology, and to the explanation of various morbid

processes both in medicine and surgery. We cannot say therefore that it would be added as a new subject. It would be merely taught methodically, and would prove an assistance to the student in his course of study, rather than an increased difficulty. It is sometimes assumed by those who complain of the number of subjects in the medical curriculum, that the student is expected to learn each thoroughly. To learn any subject thoroughly is the work of a lifetime. All that can be expected from a medical student is, that he shall learn the general principles of the various sciences auxiliary to medicine, and shall attain such an amount of knowledge of each that he shall not be altogether lost when he has to apply them to practical medicine or surgery, and that if necessary he shall know what book to refer to for further information, where to look for what he wants, and when he has found it that he shall be able to understand what he reads. The objection therefore to a scientific course of study, that it increases the number of subjects in the curriculum, seems of but little weight.

With regard to the lengthening of the period of medical study, the objection also is more apparent than real. If the period of study were lengthened from four to five years, it need involve no hardship. The preliminary examination in general education may be, and very frequently is, passed at the age of sixteen. The most difficult of all the entrance examinations, the matriculation at the London University, is passed best by well prepared boys between sixteen and seventeen. Now all those who pass at this age must wait five years before they can obtain a licence to practise. To these, therefore, it would be no hardship to spend a year in the study of the preliminary sciences. Moreover, if it were understood that a year had thus to be spent, it would become the custom to send the candidate up for the entrance examination at the earliest possible age. Of course it is much better that the general education should be continued till seventeen or eighteen, but I am only discussing the case of those to whom it is of importance to gain a legal qualification at the earliest possible time, and for them the luxury of a prolonged general education must be dispensed with. It must not be forgotten in discussing this point, that a very considerable number of students are obliged through misfortunes at their examinations, to lengthen their period of study, sometimes to seven or eight years. The number of these unfortunates will probably in the future be greatly increased by the new regulation of the College of Surgeons, which places a compulsory interval of two years between the primary and the final examinations. To many of these, I believe, a period of compulsory training in science would prove a real assistance in shortening their time of study, by enabling them more easily to acquire the necessary knowledge. And supposing the period of study were actually lengthened by a year, we should still be only returning to the old period of apprenticeship, which lasted five or even seven years. The student himself should, perhaps, be the last to complain of any prolongation of the time of study, for his time at college will probably be the pleasantest part of his life. An examination now and then no doubt forms a hateful incident during its course, but the real troubles of life begin when the last examination is passed. An examination is no great trouble to a student if he is properly prepared for it, and the addition of a simple preliminary examination in science would, I believe, for the reasons I have already given, tend to make it more easy to prepare for those that follow.

Lastly, we have to consider the objections still occasionally raised to the modern system of education, that the value of mental training is more an idea than a reality; that science is of no direct use to the ordinary practitioner; and that, on the contrary, a scientific education tends to make a man unpractical. To deny the value of mental training seems to me to be evidence of want of it on the part of the person who does so. The argument usually employed is that men are to be met with who go through a thorough course of scientific training, and come out at the end as illogical as they began; and, on the other hand, it is not uncommon to meet with those whose scientific education has been defective, and yet whose mental faculties are developed to a high degree. The fallacy of the argument lies first in the assumption that those whose scientific training has been defective would not have been better had their minds been more correctly cultivated; and, secondly, in drawing the general conclusion that training is of no use, from the exceptional cases in which it has failed to produce the desired effect. I feel myself no doubt whatever that those men learn their medicine and surgery more quickly and more thoroughly who have undergone a proper preliminary preparation in science. Those who manage to distinguish themselves at examinations, and yet remain illogical and unpractical, are, as far as my experience goes, those possessed of a memory of unusual retentiveness, a faculty which is not necessarily associated with a high order of intelligence. There is, I believe, at the present time a hopeless idiot in Earlswood Asylum who possesses a memory of such extraordinary power that he could, if properly coached, be easily made to take first place in almost any competitive examination.

Of the value of science in the practice of medicine and surgery there can be no doubt. In the first place, to the ordinary practitioner chemistry, and a certain amount of natural philosophy, are essential if he is to undertake intelligently the practice of hygiene—now as important a department as either medicine or surgery. The post of medical officer of health is one, at the present time, open to every medical practitioner, and often furnishes a welcome addition to the somewhat narrow income of the country doctor. In this post he will be expected to undertake the simpler tests for adulterations of food and the purity of water, and he will be required to give advice on questions of ventilation, heating, and warming, and on numberless other subjects in which some knowledge of science is involved. But the innumerable applications of science to modern medicine and surgery are of no less importance. With regard to medicine I would not venture to speak, but I have no hesitation in saying that the wonderful advance which has been made in surgery during the last twenty years has been entirely due to the application to it of science and the scientific methods of investigation. During that period surgery has made more real progress than at any previous time in its history; and this progress has been chiefly due to the discovery of the nature and causes of surgical fever, and of spreading and infective inflammations. It commenced as late as 1866, by the application of Pasteur's discoveries to practical surgery by Mr. Lister. For centuries before this time the necessity of cleanliness in wounds had been well known, and antiseptics had been employed by all surgeons in their treatment down to the early part of this century; but so little were their properties understood, and so doubtful had been the advantages derived from their use, that at the time I was first a dresser in another hospital, twenty years ago, they had been almost completely abandoned, and wounds were treated either by the application of a dry dressing, which was removed when the smell became intolerable, or by placing over them a piece of lint soaked in simple water and frequently changed. Water alone, without the addition of any antiseptic, was used to wash away the discharges. It was only when the discoveries of Pasteur showed us that so-called clean water is in fact one of the dirtiest things in nature, that this treatment was abandoned. Yet while this treatment was being adopted, and it was possible to tell by the smell alone whether you were in a medical or a surgical ward, surgeons were constantly insisting upon cleanliness as the most essential feature in the treatment of wounds, so little idea then existed of what true cleanliness is. Dirt at that time, in the form of putrefying discharges, was considered inevitable; cleanliness consisted in clearing away the decomposing matter: the higher scientific idea of cleanliness, as consisting in the absolute prevention of decomposition, was impossible till Pasteur's discovery had shown to what decomposition is due.

About the same time that Mr. Lister was introducing the antiseptic system of treating wounds, Bergmann and others were, by carefully devised experiments, proving the fact that the high fever which then almost invariably accompanied all large wounds and severe injuries was due to the absorption by the surface of the wound of the chemical products of putrefaction contained in the decomposing discharges. The investigations into inflammation and the allied processes were at the same time establishing as a pathological fact the absolute necessity of an abundant decomposable exudation from the raw surface of a wound during the first few hours after its infliction. To provide a sufficient exit for this discharge by a proper system of drainage became, therefore, an essential feature in the scientific treatment of wounds. Drainage, like the use of antiseptics, was nothing new. Tubes made of metal, and tents of various kinds, were used centuries ago, but, as with the antiseptics, their use was not founded upon scientific principles; and in the anxiety to avoid the introduction of foreign bodies they were completely abandoned, so that twenty years ago such a thing as a drainage-tube in a fresh wound was hardly thought of. Empirical surgery had tried both antiseptics and drainage, and had abandoned

them as useless. Scientific surgery showed their real value, and although the present methods will undoubtedly undergo modification, these two great principles must remain as essential features of every mode of treating wounds. It is to the scientific mode of treating wounds that we owe all the marvellous progress of surgery during the last sixteen years. This progress is not to be judged of by the number of new operations that have been introduced into practical surgery, nor by the heroic nature of some of those recently performed, but rather by the improved results of the common operations, and the greater success that attends the treatment of common injuries.

The study of the unhealthy processes in wounds is still advancing in the hands of Koch and others, but there still remains much to be done. Unfortunately in this country the means of carrying on such investigations are surrounded by so many legal difficulties that we are obliged to trust chiefly to foreigners for new matter, but we can take our share in applying the discoveries of foreign pathologists to the practical treatment of diseases, and to prepare us for this a proper scientific training is a necessity.

That a scientific education tends to make the student unpractical is another argument sometimes used. It is but a poor compliment to our profession to assert that those practise it best who know least about the nature of the diseases they undertake to cure. The complaint as to the want of practical knowledge in the students educated on the modern system comes chiefly from the general practitioner, who asserts that the present student fresh from his college and hospital is of but little use to him as an assistant. If called upon to dispense he is ignorant of how to make his mixtures pleasing to the eye and palate, his pills are too big, his plasters too thick, and the parcels he makes up are badly folded and inelegant, and his knowledge of book-keeping is even more limited than his acquaintance with pharmacy. When a patient has nothing the matter with him he tells him so in so blunt a manner that he immediately seeks out another medical man, who will be a little more sympathetic with regard to his supposed sufferings. He looks upon every patient too much as a case, and fails in all those legitimate arts which are necessary to win the confidence of that most selfish and unreasoning of beings. A still more serious failing often shown by the modern student is, an ignorance of the various infectious diseases which are not admitted into general hospitals. There is no doubt, therefore, that the general practitioner has just cause to complain when asked to give a hundred a year to a man who, however well trained in medical and scientific knowledge, is totally ignorant of the business element which necessarily forms a part of our profession. He finds that he has to pay a man for learning from him that which in the days of apprenticeship he was handsomely paid for teaching. The only remedy for this seems to me to be in the hands of the general practitioner himself. He should refuse to give more than board and lodging to any man who has not had six months' experience of actual practice. Six months of such experience would be quite sufficient, and at the end of that time, I have little doubt, the modern student would practise his profession none the worse for possessing a better knowledge of the principles which guide his treatment.

One advantage of a proper scientific training, to which I have not yet alluded, is that it tends to fit every medical man to take his part in advancing medical knowledge, should he feel the inspiration to do so. The general practitioner is placed in circumstances which enable him to observe certain points in clinical medicine and surgery much better than the consulting physician or surgeon. He sees most of his cases from beginning to end; he can observe those preliminary symptoms which indicate the approach of grave disease; and he has the opportunity of verifying his own conclusions and those of such consulting physicians or surgeons as the patient may have seen. He has unusual opportunities of studying the influence of heredity, of occupation, and of locality on disease, so that, should he feel inclined, he has no lack of opportunity of prosecuting original investigations. A proper scientific training will teach him the method of conducting such investigations, the precautions necessary to avoid error and the utter worthlessness of opinions formed merely as the result of experience, and unsupported by accurately recorded observations. Such original research would be of all the more value, as it would, in most cases, be spontaneous, and undertaken purely from the love of the work, and not, as is so much that is done in the present day, merely with the view to say or do something new in order to obtain promotion either in a hospital or medical school.

Supposing it then to be granted that the best training for every student should include a preliminary education in science, how could such a scheme be carried out? In the first place, it is absolutely necessary that the examinations should correspond to the course of study. Taking sixteen as the age at which a boy could pass his preliminary examination in general education, he could then immediately turn his attention to science. There is no reason why this should not be done before leaving school. At Epsom Royal Medical College students are now prepared for the preliminary scientific examination of the University of London, and there ought to be no difficulty in preparing for a similar examination of a lower standard at any good school. If there were a demand for such education the supply would soon be abundant, and after passing the entrance examination the boy could, if necessary, be moved to some school where the required instruction was given; or, if his parents preferred it, he might at once enter at a college, and enjoy the advantages such institutions naturally possess. The examination in science might take place at seventeen. The subjects of the examination would be chemistry and natural philosophy, and either botany or zoology, or both. After passing this the student could commence regular medical study with a much better chance of making good progress from the very beginning. At the end of the second year, and at the age of nineteen, would follow the examination in anatomy, physiology, and materia medica, and perhaps in applied chemistry, and the remaining subjects at the end of the fourth year of study, when the student had reached the age of twenty-one. Part of his last year of study might doubtless with advantage be spent in receiving instruction from a general practitioner.

There seems nothing impracticable in such a scheme as this, but in order to carry it out it is absolutely necessary that the present disjointed system of examination so often followed, in which some subjects are passed before one examining board, and others before another, should be in some way made impossible. The conjoint scheme does not seem, however, to be as yet within the range of practical politics. The report of the Royal Commission which has just been sitting seems, in the absence of compulsion, to leave us much where we were before. In fact, the idea of a harmonious conjunction between bodies so different in tradition and in character as the University of Oxford and the Society of Apothecaries is, perhaps, somewhat Utopian. It is not, however, necessary for the whole seven licensing bodies of England to conjoin to produce the desired result, so far as the student is concerned. The universities have already expressed a willingness, and are, in fact, empowered to cease giving their graduates a legal right to practise. That they should thus be ready to give up one of their most ancient privileges makes it more to be regretted that they were not equally willing to renounce any direct part in the appointment of examiners, and in the management of the proposed conjoint examination. If the universities retired we should have left, as far as England is concerned, only the three corporations; and it at first seems rather surprising that these three bodies find it so difficult to sink their differences, and unite for the purposes of examination. This surprise will, however, be somewhat lessened if we look back at their history; and it may not be uninteresting to you if, in conclusion, I try, as shortly as possible, to trace how these three bodies have arisen, where we only want one, as I think a review of their history may tend to suggest a remedy for the evil.

In the early part of the reign of Henry VIII. the medical profession consisted of physicians who had received licences to practise both medicine and surgery, either from the bishop of the diocese or from the Universities of Oxford and Cambridge, but who were not united into any corporate body, and of "two several and distinct companies of surgeons, one called the Barbers of London and the other the Surgeons of London," the former having been incorporated as far back as the year 1461. Outside the profession were the apothecaries who kept drug shops. These were under the control of the Grocers' Company, and had no legal right to practise medicine. In 1518 Henry VIII. granted letters patent, constituting the College of Physicians. From its very foundation it was a body of great dignity and power. The physicians held a social position much higher than the surgeons. Most of them had received an academic education, and were possessed of some degree of culture. The surgeons were as often

as not rude uncultured men, their professional education consisting entirely of an apprenticeship to some freeman of the company of barbers or surgeons. About twelve years after the foundation of the College of Physicians, the two companies of the barbers and surgeons were joined into one; yet curiously enough, any single member of the company was forbidden to practise both the mysteries of barbery and surgery at the same time, unless he was the domestic servant of some great man. This was to prevent their spreading disease, by opening foul abscesses and shaving with the same instruments. The surgeons were kept closely confined to the mechanical part of their art, and if they ventured to order a dose of medicine, they were fined and imprisoned without mercy by the President of the College of Physicians.

For a short time they had, however, the satisfaction of tormenting the apothecaries in their turn, if they ventured to undertake the care of surgical cases. But this happy time for the surgeons was of short duration, for three years after the two companies were joined, an Act was passed, in the preamble of which they were accused of "vexing divers honest persons, as well men as women, whom God had endued with the knowledge of the nature of herbs, roots, and waters;" of "extorting money from the diseased," and of "having so small cunning, that by reason thereof, they did sometimes impair and hurt their patients rather than do them good." Wherefore, it was enacted, that practically anyone might practise surgery who thought he had a gift in that direction.

For a long time after this, the physicians had the pleasure of tyrannising over both the surgeons and the apothecaries. The apothecaries had the advantage of the assistance of the powerful Company of Grocers, of which they formed a part, until the reign of James I. Then for the first time they were incorporated, but it was not till a few years later, in 1616, that they were definitely separated from the grocers and established as an independent company, under the name of the Society of Apothecaries of London. They were not, however, free from the College of Physicians. Either the President, or some physician delegated by him took part in the examination which had to be passed before an apprentice could be made free of the company, and the duty of inspecting and destroying adulterated drugs, which was transferred to them from the grocers, was carried out in conjunction with, and at the command of, the physicians. The apothecaries were the pharmaceutical chemists of that time, and, like the chemists of the present day, seem to have taken every opportunity of prescribing as well as of dispensing medicines. At first the College of Physicians resented this, and summoned many apothecaries before them, and fined some and "excommuned," or, as we should say in the present day, "boycotted" others. Still the practice grew, and at last the apothecaries claimed the right of prescribing as well as dispensing. The struggle between them and the physicians was long and bitter, and it was not finally settled till a judgment was given in their favour in the House of Lords in 1708. During this time the surgeons and barbers remained united, and it was not till 1745 that they finally parted company, the surgeons establishing themselves independently in Surgeons' Hall, as the Corporation of Surgeons of London.

In 1748 the apothecaries obtained an Act of Parliament which confirmed their power of prescribing medicines, gave them additional powers of examining, and made it illegal for any man to dispense medicine within seven miles of London without their licence. It now became common for medical men to hold both the licences of the apothecaries and surgeons, and thus arose the so-called surgeon-apothecary, and in his hands was the greater part of the practice of the country. After they were beaten by the apothecaries the power of the physicians rapidly declined, and they seem to have retired into a state of sulky and offended dignity, and not to have taken the part they might have done in controlling the education of the lower grades of the profession. At the end of the last century the Surgeons' Corporation seems to have died a natural death, and now was lost the great opportunity of uniting the physicians and surgeons, which will probably never return. The College of Physicians has always maintained that surgery is only a branch of medicine, and that their licence entitles its holder to practise both; and it is much to be regretted that they did not act upon this assumption. At the time when surgery was practised chiefly by illiterate men, who also undertook the trade of "barbery," any union between the ignorant barber-surgeon and the cultivated physician was out of the question. But in 1800 things had changed, and the physicians need not have felt it beneath their dignity to welcome within their body a class of men amongst whom had but recently been Percival Pott, Cheselden, Sharp, and John Hunter. Yet although many surgeons also recognised the inseparability of medicine and surgery, the idea of uniting the physicians and surgeons seems never to have been entertained, and the College of Surgeons in its present form was founded. Possibly if this desirable union had taken place, the encroachments of the Society of Apothecaries might have been withstood. As it was the surgeons became rather the allies of the apothecaries, and upon the surgeon-apothecaries fell the task of raising the lower grades of the profession to a higher and more dignified position. Under their influence was passed the Act of 1815, which gave the apothecaries further powers of examining, and extended their jurisdiction to the whole of England and Wales. This Act was evidently intended to perpetuate a lower grade of the profession, who should combine the trade of the druggist with the practice of medicine. That this was so is shown by the fact that the apothecary was bound under heavy penalties to prepare prescriptions ordered by a physician. It was also intended that the chemist and druggist, who was now arising as an independent tradesman, should not be allowed to prescribe. The apothecaries were not, however, content with this inferior position, their ambition being to grant a licence on equal terms with the College of Physicians. They consequently limited their apprenticeship to five years, and made attendance at a medical school compulsory; and it cannot be denied that at this time they did more to raise the general standard of knowledge in the medical profession than any other body. While doing this, however, they neglected their proper business, and allowed their influence in the drug trade to slip from their hands till, in 1841, a separate society — the Pharmaceutical Society of Great Britain — was established, which relieved them from their last duties in connexion with that trade. Finally, the Act of 1858 practically made the licences of the two Colleges and the Apothecaries' Society equal. At the same time some of the evils that it was intended in 1815 to correct have reappeared in an aggravated form. By the destruction of the old apothecaries, who sold their drugs and gave their advice for nothing, the field has been left open to the chemists and druggists, who now probably do about as much practice as the legitimately qualified medical men. The apothecaries are thus as it were "hoist with their own petar." They have raised the general practitioner till the College of Physicians has at last condescended to take notice of him, and arrange a suitable examination for his benefit. They have lost every trace of influence in the drug trade, and their licence confers no special privilege on its holder; and it need not be said that few would not prefer the letters L.R.C.P. after their names to L.S.A. Consequently, all reason for their continued existence has disappeared. It is useless to plead as an extenuating circumstance, that they did good work in raising the general practitioner sixty years ago. They have forgotten that it is said "Be not weary in well-doing," for they seem soon to have wearied, and practically for the last quarter of a century they have done less to improve medical education than any other body in this division of the kingdom, the University of Oxford perhaps excepted. But it is not likely that they will retire from the false position into which they have thrust themselves; it could hardly be expected from human nature. To call in the aid of the State would be a great calamity for the medical profession, which has so far managed its own affairs. There is, however, another alternative and that is, the union of the two colleges for the purpose of examination. The College of Surgeons now holds a position of nearly equal, if not equal dignity, with the College of Physicians. To this it has arrived by the improvement of the science and art of surgery, which it represents. It has, perhaps, done its duty better than either of the other corporations. It has never allowed the control over surgical education, from the highest to the lowest grade, to slip from its grasp, nor has it until quite recently undertaken any duties properly belonging to another body. The union for the purpose of examination of such a body with the physicians ought to present no difficulties, and if it were effected the Apothecaries' Society would probably before long die a natural death. No further conjoint scheme would be wanted for England. At present something is urgently required; not so much to protect the public from ignorant practitioners, for that I

believe is sufficiently done by all the examining boards, but for the protection of the student from the present irregular, unscientific course of education which he is so often allowed to follow.

Introductory Address

DELIVERED AT

ST. THOMAS'S HOSPITAL,

On the Opening of the Winter Session, October 2nd, 1882.

BY SEYMOUR J. SHARKEY, M.A., M.B. OXON.,

ASSISTANT-PHYSICIAN, JOINT LECTURER ON PATHOLOGY, AND DEMONSTRATOR OF MORBID ANATOMY AT THE HOSPITAL.

(*Concluded from page 564.*)

OF course it remains a question of degree whether improvements in the treatment of diseases have kept pace with the increase in our knowledge of them. But that great improvements have been made admits of no doubt. One of the most important outcomes, however, of our advances in physiology and pathology and the natural history of disease is that we have recognised the following facts: that many affections are incurable, that they depend upon certain definite causes, and that these causes are often avoidable. Hence the importance of what is now termed "preventive medicine." In our treatment of chronic diseases we place our patients, as far as we can, in conditions which arrest the progress of the morbid changes which are going on in their organs. But why not prevent these changes altogether? This must evidently be our aim both now and in the future; though it is very questionable whether people will ever have the wisdom to submit to restrictions and rules of life in order to avoid miseries which they have never tasted.

There remains yet another department of therapeutics, to which the profession may point with feelings of legitimate satisfaction, and that is the application of surgical methods to cases upon which the administration of drugs or any other treatment whatsoever can necessarily have but little effect. The diseases referred to are abscesses in some of the large parenchymatous organs, collections of pus in serous cavities, the various forms of acute and chronic intestinal obstructions, the partial or complete removal of diseased organs, &c. The possibility of treating such affections depends of course upon our ability to diagnose, or at least suspect, their presence. And it is the increasing power which the progress of our science in various directions has given us of localising disease which has made these surgical procedures in any degree feasible. But the most important factor of all in these modern improvements has been the introduction of antiseptic surgery. Whatever may be the true *rationale* of Lister's method, whether the details he recommends need to be carried out in their entirety or not, or whatever may be the opinion of individuals regarding it, every unbiased man must confess that it has produced a revolution in that department of surgery which was formerly the field of the most unsatisfactory and fatal operations. The comparative impunity with which antiseptic surgery allows us to manipulate the peritoneum and other delicate and sensitive structures has not only resulted in the successful treatment of many patients, who would formerly have perished under the same ordeals, but it has likewise emboldened the surgeon to attempt operations which he would not have dared to do before, and even to make explorations in cases where life is threatened by obscure conditions.

To sum up, then, what can be said for the principles of modern treatment? We have thrown down the idol of universal specifics, which men had hewn out of false conceptions of disease. We have set up in its place rational scientific treatment, founded upon the knowledge of physiological processes in health and in disease; and we aim, as far as drugs are concerned, at the discovery by observation and experiment of the physiological action of substances which can then be used with greater precision in therapeutics. And although this rational pharmacology is still in its infancy, we already possess some drugs the action of which we fairly well understand. We have a few remedies which appear to have just claims to the title of specifics, and we still harbour a probably legitimate hope of discovering others, which may be effectual in certain diseases before they have produced serious organic lesions. Great strides have been made in medical surgery, and we seem likely to advance still further in this direction. But our grandest aspirations lie in the path of preventive medicine, a department which should not only embrace attempts to exterminate some diseases, and to diminish the number of persons who fall victims to others; but must likewise include efforts to prevent the extension of morbid processes which have already begun in the organs of our patients, by regulating their lives in accordance with the teachings of physiology.

It will now be evident to you, gentlemen, that if the general view I have put before you of the principles of modern medicine be correct, there is an interdependence between all the subjects which are embraced in the medical curriculum, such as did not exist in former times. Clinical medicine has to be studied in the light of pathology, pathology in the light of normal anatomy and physiology, and the latter in the light of chemistry and physics. Nor must it be forgotten that what has really given medicine a claim to be placed among the sciences is the recognition of physiology as its basis, and what has given physiology itself precision is the experimental method of investigation. We do not for a moment assert that without vivisection there would be no physiology: but the irreconcilable opponents of the former cannot even be convinced of the great advantages which have resulted to physiology and to medicine alike from the practice of experimenting upon living animals. The fault, however, lies with the anti-vivisectionists, and not with us. For the foundation of medicine is physiology, and one of the essential factors in accurate scientific physiology is experiment. To appreciate these propositions one must first realise the facts and history of physiology and of medicine. But this cannot be done, though some insist that it can, by people who have little or no knowledge of these sciences. The answer to those who would suppress vivisection altogether lies not in quoting individual useful applications to medicine of facts which have been discovered entirely by vivisection, but in pointing to the comparative precision which pervades the whole of modern physiology, and which is gradually being introduced into practical medicine, a precision which we owe to experimental methods of research.

True scientific principles are as old as Hippocrates, but the field of observation has been widely extended. With all our increase in scientific knowledge, however, it is no easier, probably harder than ever, to become a good practitioner. A man might know everything and yet be a very bad doctor. Now, as of old, no amount of book-learning will make up for deficient dexterity in the examination of patients, or for the want of clinical experience. All methods of investigation must be carefully learnt and skilfully applied. Stores of knowledge must be at command, and the reasoning powers must be called into play to a degree probably not surpassed in any other profession. The best means of ascertaining what is really the scientific method of medical practice is to watch the work of a good physician by the bedside. A few years ago this school had to mourn the loss of one of its brightest luminaries, Charles Murchison, an eminent scientific physician and consummate teacher. His wide and varied knowledge of anatomy, physiology, and pathology, which he applied with such ability by the bedside, his splendid powers of observation, his keen logical acumen, his clear and easy exposition, and his contagious enthusiasm, formed a whole the charm of which has rarely been equalled, and can never be forgotten by his pupils. Nor can we mention Dr. Murchison without being reminded of another loss which we have this year sustained in Dr. Peacock, long a member of our staff, whose methodical and accurate observations have placed him among the highest authorities in more than one obscure region of pathology, and whose lively interest in medicine was shown by the eagerness with which he clung to the duties of his profession up to the last moments of his life.

But it may be asked, Have the modern methods been productive of good unalloyed? Are there no evil tendencies to be striven against? The increasing power of localising disease, with which we have just reason to be satisfied, frequently leads practitioners to look upon the body as a number of separate organs, each of which has its own peculiar affections and its own proper methods of treatment

The grand object often seems to be to diagnose the disease, and then to prescribe drugs said to be beneficial in it. But if physiology has taught us one thing more certainly than another, it is the intimate union of the individual parts of the body to form a concrete whole. One organ cannot be deranged without altering the conditions which surround the others, and interfering with the healthy composition of the blood and with the normal course of nutrition. Moreover, some organs are united by even closer bonds, in the form of nerve communications; or they have some similarity of function, which enables them to a certain extent to act vicariously for each other. Consider the innumerable derangements of health referable to almost every part of the body, which may result from the physiological cessation of the functions of the uterus and ovaries at the climacteric. In this instance energetic factors in the production of the vital equilibrium suddenly cease to exert their influence. The patient has lived long enough to have alterations of an abnormal kind produced in some of her tissues. These, if they are not fanned into a blaze by changes which then take place in their nutrition, are at least productive of functional disturbances within the area which they occupy. This is a typical instance of a condition which affects not one organ only, but the whole vital equilibrium, and the re-formation of the latter on an altered basis sometimes takes years to effect, sometimes is the source of never-ending ill-health. In any case a rational and effectual treatment must rest, not on a consideration of the state of one organ alone, but of all the physiological processes which take place within the body. Nor is this an isolated example. A very large proportion of local diseases produce widespread effects on the organism in general, and cannot be rationally treated by confining our attention to the part which is most conspicuously at fault.

Another offspring of modern medical thought is the tendency to scepticism—a tendency which we must not sweepingly condemn. It has arisen mainly with regard to the treatment of disease by drugs, and is the natural result of increasing knowledge. When a medical man studies disease from our present point of view, and is brought face to face with the wreck which it makes of the most vital structures, he must indeed be illogical if he does not rapidly cease to believe in the efficacy of any drugs whatsoever, either to repair the damage done, or to act as a substitute for the diseased organ in the economy. This scepticism regarding the possibility of finding specific cures for diseases in general is a most laudable trait, and shows an appreciation of the principles of modern therapeutics which is likely to lead to a far more effectual treatment of the patient than any blindly empirical administration of remedies.

But, gentlemen, you must not misunderstand me, and suppose that I have less confidence than I really have in our Pharmacopœia. I believe it to be composed of—first, a small number of very useful drugs, the physiological action of which is known, and the application of which to diseased conditions is of incalculable value; secondly, it contains a considerable number of remedies, the efficacy of which has been proved in many abnormal conditions, though the *rationale* of their action is still unknown; and, lastly, it contains a host of articles which some people assert to be useful for one thing, some for another, but about which very little of any value is known. Now the sceptic, who seems to me to be culpable and unscientific, is not he who has no belief in, and consequently discards, the motley collection of substances contained in the third category, but he who declines to use any drugs except those of the first, the physiological action of which is well understood, and for the administration of which he can see a *rationale*. Such a one will not use those medicines, the properties of which have been ascertained by a long series of observations, while their mode of action is obscure. This is an illegitimate and reprehensible scepticism. For although it must be the aim and glory of medical science to add constantly to those drugs the physiological action of which is known and the application of which to disease is so much the more certain; still the medical art must always remain one of observation and experience, and it is rational and scientific to act upon the results of these, though we may have long to wait for an explanation of what occurs.

It has often been remarked that the best physicians use few drugs, and, compared with the whole contents of the Pharmacopœia, the rational scientific sceptic will have only a small number of remedies which he cares to prescribe; but making himself by constant observation more familiar with their action, and with the conditions to which they are applicable, he will use them rather as arms of precision, and his treatment will be to the point and effectual; while what may be called the "mitrailleuse" system of the less sceptical practitioners of former days relied rather upon the number of substances which were mixed together in the hope that some might hit the mark.

In the short account which I have presented to you of what appear to me to be some of the leading principles of thought in the medicine of to-day, I have implied that we are entitled to feel a certain degree of satisfaction in the progress which has been made. But let us remember that what we now know, and what we can accomplish by our art, is but a very small fraction of that which will one day be achieved by our successors. Let us make a modest estimate of the present state of science, and not give anyone in future times the opportunity of quoting boastful utterances of ours, as I am now about to quote a surgeon who flourished some three centuries ago. Ambrose Paré wrote thus—"God is my witness and all good men know that I have now laboured fifty years with all care and pains in the illustration and amplification of my art, and that I have so certainly touched the mark whereat I aimed, that antiquity may seem to have nothing wherein it may exceed us beside the glory of invention, nor posterity anything left but a certain small hope to add some things, as it is easy to add to former inventions." Let that be a warning to anyone of us who is inclined to exult in the present state of science, which may have made more progress at the end of the next three centuries than it has since the time of Ambrose Paré.

In days gone by many a sect, many a system of medicine has flourished and decayed, and whatever truth existed among their errors has been built into the scientific fabric of to-day. Homœopathy alone remains. But even homœopathy has discarded many of the absurdities of its founder, Hahnemann. It professes to accept and be guided by the data of modern science, and to differ from us only in the treatment of disease. It seems to me, too, that many professed homœopaths have practically retired even from this position, and have faith no longer in "dynamisation" and infinitesimal doses, but hold merely to the theory "Similia similibus curantur." This dictum is a distortion of a truth, and should express nothing more than this—that if we give drugs in large poisonous doses, we ascertain by the symptoms produced the organs on which they act, and we then administer them in smaller quantities when we wish to elicit their physiological action in cases of disease. The truth which is really involved in "similia similibus curantur" is nothing more than the elective affinity of certain drugs for certain organs, and the fact that if given in poisonous doses they derange the action of these organs. But this is not a method of experimental pharmacology which is characteristic of homœopathy, but one which has long been used in ordinary common sense medicine. Those homœopaths who differ from us in little more than this theoretical question, as to why certain drugs are indicated in certain diseases, have no right to place themselves under the banner of another sect, thereby deceiving the public, who are led to believe that their imposing name implies a *bonâ-fide* difference in practice. But the rest of the homœopaths, if there really be a remnant, who can plead that they honestly believe in infinitesimal doses, in the dynamisation of drugs by trituration and dilution, and in other palpable absurdities, may practise upon a deluded section of the public, but cannot possibly be received as the colleagues of reasonable men. No, gentlemen, the day has long gone by when systems of medicine were admissible. There is but one system—the scientific,—which rests upon observation and experiment, and upon the application of science in general as a guide to the knowledge and treatment of disease. Therefore avoid being led astray by the seductive theories of any sect whatever. Be neither homœopaths, nor allopaths, nor antipaths, nor any other "paths," but scientific medical men. And if you really are such, you will secure one of the greatest sources of happiness through life, one of the greatest consolations in its many uncertainties—an enthusiasm for your profession. And having that, you cannot fail to feel also a love and enthusiasm for the school where you first became imbued with the principles of scientific medicine.

THE salary of Mr. Butler, surgeon at the Brighton Sanatorium, has been increased from £100 to £150 per annum.

ON THE RELATION OF PARTIAL RETENTION OF URINE TO ITS DECOMPOSITION WITHIN THE BLADDER.

BY WILLIAM S. SAVORY, F.R.S.,
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THE opinion is, I believe, current, it is certainly general in our books and elsewhere, that inability to empty the bladder completely is a common cause of chronic inflammation of the viscus, because a portion of stagnant urine is retained until it is decomposed, and so becomes an irritant. In this way, by confining some of the urine until it becomes decomposed, it is stated that all forms of obstruction to its exit produce chronic cystitis. Now, is not this opinion that residual urine thus remains to decompose based on a misconception of the actual facts, or at all events of the cause, in such a case? Is it not assumed that the urine which remains behind is a fixed quantity, and therefore stagnant? Is it not overlooked that, although the bladder may be never emptied, yet that, inasmuch as a large portion of the urine it contains is frequently leaving it to be replaced by another portion which is continually entering it, the same portion of urine does not necessarily remain long enough in the bladder to become, of itself, the source of the mischief that ensues? Of course urine may remain long enough in the bladder to decompose, for no one needs to be reminded of the fetid urine reeking of ammonia in chronic cystitis; and it admits of demonstration that urine which enters the bladder in a healthy state is very rapidly changed by the disordered secretion of that organ. But this need not depend simply on retention, either total or partial. Micturition may be frequent, and the bladder may be frequently quite emptied, and yet the urine that flows may be putrid; or urine may be retained for a very long period, and yet when it escapes there may be no evidence of decomposition. In many cases, for example, where a person is confined to the recumbent position, the bladder is never able to expel the whole of its contents, and yet this state of things may continue for weeks without the residual urine showing any sign of decomposition; and in other cases, where it may even become necessary to draw off the urine in this enforced position of the patient, the bladder, in all probability, never becomes completely emptied, and yet, at least for a long while, the urine passes without change. Therefore, even if all reasoning on the matter be excluded, it cannot, in the face of these facts, be accepted that as a rule residual urine is to be regarded as the source of the mischief that is so often associated with it. No doubt the longer any given quantity of urine is retained in the bladder, when the causes of its decomposition are rife there, the farther will its decomposition proceed. But the duration of the retention of any given portion is by no means represented by the amount of residual urine after each act of micturition. The quantity of urine which enters and escapes from the bladder daily must rather be considered. Just as the water drawn off from a cistern gives no evidence of being stale or changed, although the reservoir is never emptied, because the whole of its contents are nevertheless rapidly renewed.

If healthy urine is passed into a bottle capable of holding, say, two pints, and the bottle as it becomes filled is from time to time only partially emptied, so that always about half a pint be left behind, the urine in the bottle, even after months, will still retain an acid reaction. It does not become ammoniacal or acquire the characters of the urine in chronic inflammation of the bladder. And in this experiment the circumstances, so far as ordinary decomposition of stale urine is concerned, are, on the whole, far more favourable to change; for although the temperature of the bottle may not be so high as that of the bladder, yet air is frequently and freely admitted, and of course it is always abundantly present. If the changes by which urine becomes ammoniacal are due only to long-continued partial retention, how is the negative result of this experiment to be explained?

Yet, although I venture to think that the prevailing opinion in this respect is not well founded, I am indeed very far from saying, or even intending to suggest, that there is no evil in partial retention. On the contrary, it is clear enough that the presence of residual urine implies some delay in the escape of a portion of it, and therefore in a corresponding degree favours the advance of decomposition. But this, I need not remark, is a very different view from that which regards partial retention as a common starting-point of cystitis and the further evils which hence ensue. But then the fact remains that these two evils—residual urine, the result of partial retention, and chronic cystitis—are very commonly associated. Can this be explained? The direct and immediate cause of the decomposition of urine in the bladder, which enters it in a healthy state, is the presence and action of a morbid secretion of the mucous membrane. Practically the changes of urine in the bladder are dependent on the action of unhealthy mucus, and the degree of decomposition, although of course affected by the time the urine remains there, is yet chiefly determined by the character of the diseased secretion which mingles with it. Even under the conditions of health it is the mucus present in the urine which mainly determines the decomposition of urea, as the result of the simple experiment of filtering fresh urine shows, and when mucus is morbid it is far more destructive. Now, this disordered secretion must be the product of an unhealthy membrane; and while there is but little difficulty in understanding how, when the texture of its lining membrane is altered, the bladder is hampered in its action, and its full and complete contraction impeded, there is hardly less difficulty in believing that a full and complete contraction of it from time to time is an essential condition of a healthy mucous membrane, and of a due secretion and free escape of healthy mucus. Therefore, the conditions under which the bladder is only partially emptied are oftentimes the very conditions under which unhealthy, and therefore highly mischievous, mucus is brought in contact with the urine there.

ON A NEW TEST FOR ALBUMEN IN URINE.

BY WM. ROBERTS, M.D., F.R.S.,
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WHEN an albuminous urine is treated with a saturated solution of common salt, not the slightest reaction takes place; but if the brine be slightly acidulated with hydrochloric acid, the albumen is thrown down as a dense white cloud. This reaction constitutes a most delicate test for albumen in the urine. The best degree of acidulation for this purpose is obtained with about 5 per cent. of the dilute hydrochloric acid of the Pharmacopœia. A little more or a little less acid makes no appreciable difference in the sensitiveness of the test. Common salt dissolves in about two and a half times its weight of water at 60° F., and increase of temperature does not sensibly increase its solubility. The salt of commerce is always more or less dirty, and the solution requires filtration to fit it for use as a test. The salt solution should be fully saturated, otherwise the observer is apt to be led into error. In preparing the test with our common English measures the readiest plan is to mix a fluid ounce of dilute hydrochloric acid with a pint of water, and to saturate this with common salt, and filter. Dilute hydrochloric acid may be replaced by dilute sulphuric, dilute nitric, or dilute phosphoric acid. All these acids are of the same saturating strength in the British Pharmacopœia, and all of them yield with saturated salt solution an equally sensitive reagent for albumen. Even acetic acid may be used, but the delicacy of the test in that case is not quite so great as when it is prepared with one of the mineral acids. The method of applying the brine test is similar to that followed with nitric acid. A portion of the suspected urine is placed in a test-tube, the test-tube is then held very much aslant, and the salt solution is allowed to trickle along the sides of the tube to the bottom, so that it may form a distinct layer below the urine. If albumen be present, a white cloudy zone appears at the junction of the two fluids. Or the proceeding may be reversed. The salt solution may be first introduced into the test-tube, and then the urine added with the same precautions as before, so as to obtain two distinct layers, one above the other, in the test-tube. It is important to be aware that the precipitation of albumen by acidulated brine is not due to a true coagulation. In this respect the

brine test differs from nitric acid and boiling. In the two latter cases the albumen is transformed into the insoluble modification, which is known as "coagulated albumen." But when albumen is thrown down from urine by acidulated brine, the precipitate is not insoluble; on the contrary, it is redissolved by free addition of water, or even by free addition of the albuminous urine itself. It is therefore essential to the efficient application of the test that the salt solution should be in excess at the point of expected reaction. This end is obviously secured in the above-described methods of testing. It may also be secured by adding to the suspected urine a volume of the salt solution at least equal to that of the urine in the test-tube. If this point be not attended to the test is unreliable. For instance, if acidulated brine be added drop by drop to an albuminous urine, and the mixture shaken up after each addition, the first few drops either occasion no turbidity whatsoever or the turbidity produced disappears on shaking. But when by successive additions the quantity of brine approaches to or surpasses the volume of urine operated on the turbidity remains permanent. In point of delicacy the salt test stands on a par with nitric acid. The minutest trace of albumen detectable in the urine by nitric acid is also detectable with equal ease by acidulated brine. In high-coloured urines the brine test is distinctly superior. In this class of urines nitric acid produces a deepening of the tint, with, often, a disengagement of gas, which interferes with the sensitiveness of the reaction, but the brine test neither alters the tint nor causes disengagement of gas. On the other hand, I think that nitric acid gives a better idea of the quantity of albumen present by the density of the white cloud produced than does the brine test. In addition to albumen, acidulated brine precipitates peptones, which are sometimes present in urine; so that occasionally a slight cloudiness is produced by the salt solution where nitric acid and boiling (which do not precipitate peptones) produce no reaction. This distinction in the action of the brine test may hereafter lead to interesting information. In dense urines, highly charged with urates (but not containing albumen), the addition of nitric acid sometimes throws down the amorphous urates in the form of thick white clouds, and it is necessary to apply heat to distinguish with certainty the cloudiness so produced from cloudiness due to albumen. The salt test does not throw down the urates in this way. It is well known that the urines of patients who are taking large doses of resinous substances (such as the resin of copaiba), although free from albumen, yield a cloudiness with nitric acid in the cold, but if the urine be previously made hot, nitric acid produces no such reaction. This difference serves to distinguish cloudiness due to resin from cloudiness due to albumen. The brine test also produces a cloudiness in resinous urines, and the reaction occurs whether the urine be hot or cold. To avoid the fallacy thereby arising, all that is necessary is to add an excess of the urine which is being tested. If the cloudiness be due to albumen it disappears on such addition, but if it be due to resin, the cloudiness does not disappear on the addition of more urine. One of the chief advantages of the salt test is its incorrosive character. It does not stain nor burn holes in garments and carpets, nor fleck the hands with yellow spots. The use of it makes it possible to arrange a pocket-case for urine testing that shall not be a terror to the wearer. From this point of view the substitution of the salt solution for nitric acid will be a real boon to practitioners.[1] The salt test has this additional convenience—that it enables us to test successively for albumen and sugar on one and the same sample of urine. The suspected urine is first tested for albumen with the salt solution, and then Fehling's solution, or, still better, a pellet of the solid Fehling's test sent out by Cooper is added, and heat applied. After boiling a few seconds the absence or presence of sugar is ascertained. The admixture of the brine in no way interferes with the copper reaction, in case sugar should exist in the urine.

Manchester.

[1] I have carried about with me for some months past a little pocket-case (which is only a stiff-backed cigar-case) which I have found a useful and safe clinical companion. It contains a book of litmus papers; a narrow corked phial filled with acidulated brine; a test-tube charged with Cooper's pellets of the solid Fehling's test, guarded with an india-rubber stopper; and, lastly, an empty test-tube, also provided with a cork. This compact arrangement furnishes the means of ascertaining the reaction of the urine, and of testing it in the most delicate manner for albumen and sugar. The empty test-tube also serves to carry home a specimen of the urine for further and more minute examination. The "pellets" (made after a suggestion of Dr. Pavy) are sent out by W. T. Cooper, chemist, 26, Oxford-street, London.

THE VOLUMETRIC ESTIMATE OF ALBUMEN IN URINE.

BY GUY NEVILLE STEPHEN, M.R.C.S.

IN the wards, and in private practice, the method most commonly employed for detecting the presence and estimating the amount of albumen in urine is the application of heat, the result being aided and verified by the addition of a few drops of nitric acid. As a simple test, this method, though not absolutely free from objection, either on the score of chemical accuracy or ease of application—a matter of considerable importance in private practice,—is yet, when applied with ordinary care, sufficiently reliable and searching to warrant its popularity, and prevent one receiving as anything more than scientifically interesting the various other albumen tests that have been and are from time to time proposed. As a volumetric test, however, applied by precipitating the albumen, allowing it to cool and subside, and then noting the proportion of the albumen which has collected to the rest of the fluid in the test-tube, and reading it off as a fraction, it is at best but a very rough method, with numerous sources of error, and, as commonly employed, gives most inaccurate and deceptive results, due partly to inherent causes, and partly to want of care in throwing down the whole of the albumen and allowing it to thoroughly cool and subside. Such as it is, nevertheless, this method is even more universally employed in the estimate of albumen than are the same reagents, heat and nitric acid, as a simple test of its presence; but probably less, because general approval is accorded to it, than because of the other methods generally known none has a claim to be substituted for it—Esbach's test being, if more accurate, much more tedious, while the actual weighing of the albumen is, from the readiness with which albumen absorbs moisture, a process that taxes the resources of even a skilled chemist. Since, therefore, we are at present in possession of no easy, rapid, and trustworthy method of estimating albumen, every fresh idea and suggestion on the subject should receive a thorough clinical trial before being relegated to the chemical laboratory; and this has not yet been accorded either in England or abroad to a method suggested by Tauret of Troyes as far back as 1872. The basis of this method is the precipitation of albumen by the double iodide of mercury and potassium, and it is equally applicable both for testing for and estimating albumen. The manner of procedure is extremely simple, and in practice the testing and estimation may be done at the same time, but for the sake of descriptive clearness the testing will here be taken first.

Testing.—For this all that is required is a solution of the double iodide of mercury and potassium and some acetic acid. The urine to be tested first must be rendered distinctly acid by the help of some of the acetic acid, and then a few drops of the solution added to it. If albumen be present a white opaque flocculent precipitate immediately forms, which on the one hand requires no verification like that formed by the application of heat to only slightly albuminous urine, and on the other is not, like the precipitate of nitric acid, liable to be redissolved by adding too much of the reagent. In point of delicacy, moreover, the test is superior to either of these, as the precipitate will form in the presence of as small a quantity of albumen as five centigrammes to a litre of water, a result which is only equalled by the very uncertain phenic acid test, and by heating with sulphate of soda. To the practitioner, too, who wishes to test urine for albumen by the bedside of his patient, it is a very distinct advantage to be able to dispense with test-tube, spirit lamp, and strong nitric acid, and to carry with him nothing but two small phials, and perhaps some litmus paper. It is scarcely necessary to enter into possible causes of confusion, as the only case in which the reagent under discussion itself gives rise to any other than albuminous precipitate is in the urine of patients who are taking alkaloids, when a precipitate may be formed which, however, is soluble either by heat or by the addition of alcohol; while the errors that may be entailed by the employment of the acetic acid, together with the means of avoiding them, are already for the most part well known. In urine loaded with urates a precipitate of uric acid may

be thrown down when the acetic is added, but merely diluting the urine with water will cause it to disappear. Mucus, too, if present, may also be precipitated by the acid, but will give no trouble, as it is quite different in appearance to the precipitate of albumen, and will have dropped to the bottom before the solution is added; and, lastly, if the acetic acid be not used in sufficient quantity to make the urine decidedly acid, urea may be thrown down by the after addition of the potassio-mercuric iodide.

Estimation.—The process for this is extremely simple and rapid, and only differs from that described above in that the solution employed is of known strength, and that the quantity used both of it and of the acid and urine must be carefully noted, and the complete precipitation of the albumen proved by a second solution. Besides the solution and acid, a glass, graduated in cubic centimetres, a pipette giving drops of five centigrammes, and a few glass stirrers, are all that is required. For the precipitating solution the formula is—potassii iodidi, 3 grms. 22; hydrargyri bichloridi, 1 grm. 35; aquæ destillatæ, q.s. ad 100 cc. For the confirmatory solution—hydrargyri bichloridi, 1 grm.; aquæ destillatæ, q.s. ad 100 cc. One drop of the precipitating solution given by a pipette of the above size precipitates 0·005 of albumen; so that so many drops as it takes to precipitate all the albumen, so many times 0·005 of albumen must there have been in solution. To save trouble in calculation, the same quantity of urine should always be taken, and the best quantity to take is 10 cc., as then the number of drops of the solution that it takes to precipitate all the albumen in this quantity of urine represents so many half grammes of albumen to the litre. Take then 10 cc. of urine, and add two of acetic acid, and stir with a glass rod; then add the precipitating solution drop by drop, stirring carefully each time, until the precipitate is no longer resolved in the albumen in excess—i.e., as yet unaffected by the reagent; then after each drop of the solution put a drop of the urine on a porcelain dish and watch if a yellowish-red colour appears on adding a minute drop of the confirmatory solution. As soon as it does, all the albumen is precipitated and the process is finished, and the amount of albumen per litre will be at once arrived at by taking the number of drops employed of the precipitating solution, subtracting three as having been used in excess to make the yellow colour perfectly clear, and then considering the rest as so many half grammes.

The chemical reactions and data upon the above depends are $2\,KI + HgCl = HgIKI + KCl$. When the double iodide of mercury and potassium thus formed is added to albuminous urine sufficiently acidified, all the albumen is precipitated in combination with the mercury and iodide of the reagent, in the proportion of the equivalent of HgIKI, weighing 393 to 1 equivalent of albumen, $C^{36}H^{76}Az^{11}O^{33}$, weighing 1004, while the potassium is taken up by the acid of the urine. As long as any albumen remains in solution the double iodide of mercury and potassium will not form red iodide of mercury when bichloride of mercury is added to it, but it does so as soon as all the albumen is precipitated. The solution formulated above is such that every drop of 0 grm. 05 contains 0 grm. 00196 of HgIKI, and therefore in accordance with the equivalents given will precipitate ·005 of albumen.

The rapidity and simplicity with which the volumetric estimate of albumen may be performed by this method, as above described, are self-evident, and it has been thoroughly tested by the writer in the Hôtel Dieu of Marseilles, and its convenience and utility found to be very great, as it offers a ready means not only of watching, as is most important, the diurnal variations in the amount of albumen in a patient's urine, but of comparing, as is most interesting, the different quantities present in diverse cases and in various diseases.

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By Dr. Robertson's report, presented at a meeting of the Committee of Management on the 7th inst., it would appear that the definite cost of the extension of the hospital has not yet been ascertained. Meanwhile the benefit resulting from the enlarged accommodation is already apparent in the increased number of patients and the proportional alleviation of suffering through the instrumentality of the institution. The returns of cards stating the ultimate result of the treatment received have been satisfactory both in quantity and kind.

NOTES ON THE

ANTISEPTIC METHODS EMPLOYED IN THE SURGICAL PRACTICE OF THE BASE AND FIELD HOSPITALS: EGYPTIAN CAMPAIGN.

BY EDGAR M. CROOKSHANK, M.R.C.S.,

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VARIOUS antiseptic methods having been employed by the surgeons of the Army Medical Department in the treatment of the wounded during the Egyptian campaign, it may be of interest to many to read the mode of application and the results which I had the good fortune to observe.

Treatment of First Wounded at Base Hospital, Ismailia.—The wounded sent down from the front after the first engagements had been, and were, treated at the base hospital, Ismailia, mostly with dressing of carbolic oil, some with the carbolic or the chlorinated soda lotion. In these cases it was found that if not dressed for forty-eight, or even twenty-four hours, the wounds were septic and the dressings odorous, and unless the latter had been covered with gutta-percha tissue, in this climate not only the lotion, but the oil, evaporated, and with the dried coagulated blood and discharge became glued to the wound, so as, even after sponging or soaking in water, to be in most cases with difficulty removed, and the cause of discomfort and of pain to the patient.

Treatment of Wounded at and after the Battle of Tel-el-Kebir.—The wounded brought from the field to the advanced field hospital after the battle of Tel-el-Kebir were dressed with the iodoform and boracic acid dressing, in the following manner. The wound and skin around were purified by washing with a strong watery solution of carbolic acid (1 in 20), and the surface of the wound sprinkled lightly with the powder of iodoform; a piece of protective dipped in carbolic, in the absence of boracic lotion, was next applied to the wound, just sufficient to cover it, and over this a couple of layers of boracic lint, fixed by means of a gauze bandage, the latter, from its lightness, being preferable in this climate to the ordinary linen bandages. Of these cases, some in which the discharge was profuse, were dressed again the next day at Kassassin, and others were not seen again until they arrived at the base hospital at Ismailia. Of the latter, the following day those in which the discharge had not appeared on the surface of the dressing, and the patient expressed himself as comfortable, remained untouched; so that there were cases not redressed until two or even three days after the reception of the wound. In these cases, just as in those dressed the day after the engagement, the dressing was perfectly sweet and the wound healthy; and last, but not least, the dressing was removed with facility, and the patient prevented thereby from suffering either discomfort or pain—the latter, of course, being due to the action of the protective, which, while enabling the discharge to run from beneath it and permeate the boracic lint, at the same time prevents the latter from adhering to the wound. Some of these cases, more particularly the severe ones—e.g., shell wounds—remained in the hospital for some days before being transferred to ships for England, and during this time their progress was carefully watched, and in all cases the same condition remained of a healthy inodorous wound, and consequently the iodoform and boracic-acid dressing met with such approval on the part of the surgeons that all the wounded who have passed through the base hospital, and those already in it since the action at Tel-el-Kebir, have, with few exceptions, been dressed at one time or other in the manner described. Of the cases already in the hospital, two may be cited as examples—one, a sailor with compound fracture of the femur, the other a private with an extensive shell wound perforating and lacerating the calf of the leg. In both these cases the wound had been dressed with the chlorinated soda lotion; nevertheless the discharge was offensive, and the wound, especially in the second case, presented a sloughing and generally unhealthy appearance. The application of iodoform and the boracic dressing acted with marvellous

rapidity, the fetor being corrected, the sloughs separating, and the wounds presenting healthy granulating surfaces. In the case of the compound fracture, the wound, after a second application, was not dressed again for five days, when the patient was ordered on board the *Lusitania*, and, before leaving, the splints and dressing were readjusted. The wound in this case had remained perfectly sweet, and, doubtless, would have continued so if left untouched for a week, the time recommended by Professor Lister when a similar dressing has been applied after the performance of skin-grafting on a large sore.

Antiseptics after Operations.—After the extraction of a bullet, swabbing the cavity of the wound with a solution of chloride of zinc (forty grains to one ounce of water), rendering the wound antiseptic, and the introduction of a drainage-tube giving free exit to discharge, and encouraging the wound to fill up by granulation, gave excellent results; and a similar treatment was equally serviceable in gunshot wounds with sloughing tract and a tendency to the pocketing of discharge. After amputations, also, the forty-grain solution of chloride of zinc proved invaluable for swabbing the flaps, not only as a powerful antiseptic, but as a styptic also, stopping all oozing and hæmorrhage from small vessels. Arteries requiring ligation were secured by means of the sulphurous or green catgut introduced by Professor Lister, and used in this campaign for the first time in military surgery. This form possesses all the advantages of the carbolic gut over silk, and over the former of greater strength, decreased rate of absorption, and from a point of view of transport in the small amount of space occupied in packing, compared with the cumbrous bottles of the carbolised gut.

In the wards a lotion, consisting of one part of the forty-grain solution of chloride of zinc with three parts of 1 in 20 carbolic, proved of great value in encouraging the separation of sloughs and rendering the wound antiseptic. This was especially brought to notice in the case of a Life-guardsman whose arm had been amputated at the shoulder-joint for a severe gunshot wound. Extensive sloughing occurred within the flaps and pocketing of pus. The removal of a couple of stitches, the introduction of a large-sized drainage-tube and syringing out the wound thoroughly with the lotion mentioned brought away the sloughs, gave free exit to the retained pus, and produced such a marked change in the appearance of the wound and general condition of the patient, that from that time the balance was turned in favour of recovery. For correcting the fetor of wounds, iodoform shaken up with 1 in 20 carbolic and syringed into the interior of the wound, also proved useful in the wards. Finally, a case of amputation of the arm by the circular method, performed at the Base Hospital, Ismailia, with Listerian precautions, tended to prove that Listerism could be carried out with equally good results in military as in civil hospital practice. It may be added as a point of interest that in spite of the iodoform having been used in some cases over large wounds more freely than was recommended, with the exception of one or two cases of headache and general malaise which may have been due to other causes, there were at any rate no marked symptoms of iodoform poisoning, which has been commented upon so much of late and considered a drawback to its use. These slight symptoms, if due at all to the iodoform, only serve to emphasise the necessity of following Professor Lister's instructions of lightly dusting and not thickly covering a wound with the powder.

CASE OF LYMPH SCROTUM, ASSOCIATED WITH FILARLÆ AND OTHER PARASITES.

BY PATRICK MANSON, M.D.

TEHHAI, male, aged thirty-four, of Tchin Kang, Tehhiah-thop, a cotton carder; both parents are deceased, his father having died of a cough, his mother of old age; young brother well; has no sisters; as far as he knows there is no elephantiasis in his village. The scrotal disease for which the patient applied began when he was twenty-six with inflammation and abscess; inflammation and elephantoid fever frequently recurred. Six years ago a lymphous discharge from the scrotum began; the scrotum was then larger and more tense than at present. Ten months ago the patient had a long series of genuine ague attacks they began as quotidian, after a time became tertian, and finally quartan. The illness lasted for seven months; he became very weak, coughed, and lost appetite; for the last month the scrotal discharge, which hitherto had intermitted, had become constant, and in consequence he was reduced to a condition of extreme debility.

Sept. 2nd, 1881.—Scrotum is larger than a man's head, and the penis is buried in it; femoral glands are most affected, especially those on the left side, which are large and varicose; only one or two are similarly affected on the right side. The greater part of the scrotal tumour looks and feels like an ordinary elephantiasis, but on the thigh aspects of the mass, especially on the left side, there are patches of large tense vesicles, and on the upper and anterior surface of the tumour, about two inches from the preputial orifice, there is a long dilated lymphatic quite an eighth of an inch in diameter. Lymph constantly escapes, spurting in a fine stream from a vesicle on the right side and from any vesicle that is handled at all roughly. Several pounds of lymph must have escaped to-day. The discharge is white, like watery milk, coagulates rapidly, and contains filariæ. Several were found during a brief examination of lymph drawn in the forenoon (at 11 o'clock). Blood drawn from the finger at 6.30 P.M. contained filariæ. He had no elephantiasis of the legs, nor did he give a history of chyluria.—3rd: As it was evident that the continued lymphorrhagia would kill the man in a very few days, I removed the tumour in the forenoon. It weighed over three pounds, and had the usual section of lympho-elephantoid scrotum. A scrotal hernia on the right side, firmly adherent to the bottom of the scrotum, gave much trouble in dissecting up the sac. Large lymphatics in the upper and outer corners of the wound discharged much lymph, and were therefore ligatured.—21st: The patient died this morning of dysentery and exhaustion. For some time before the operation he suffered from vomiting of food, and ever since the operation there has been difficulty of swallowing. The symptoms were those of stricture of the œsophagus. Watery arrowroot was about the only food he could swallow. Dysentery set in soon after the operation. At the time of his death the wound, though indolent, was clean and sweet, and was in no way responsible for the fatal termination.

Post-mortem examination, on the same afternoon.—Thin and wasted; feet œdematous. On opening the abdomen the bladder was found to be rather distended. The whole of the mucous membrane of the great intestine, from the ileo-cæcal valve to the anus, was covered with ulcers. A number of parasites, twelve in all, were found lying in the sub-peritoneal fascia, about the iliac fossæ and behind the kidneys. A similar parasite was found lying free in the right pleural cavity. Some of these parasites were coiled up in loose knots, and others lay extended. On being drawn from under the peritoneum they exhibited languid movements like those of tapeworm. The œsophagus, where the left bronchus passes in front of it, was ulcerated and thickened, the ulceration and thickening extending completely round the tube, and being about an inch and a quarter in breadth. The œsophagus and bronchus opened into each other by a small ragged hole in the ulceration, admitting a penholder, and in the left bronchus were two full-grown female lumbrici, that had evidently passed into this unusual situation immediately before or after death through this hole. The œsophagus was firmly attached to bronchus, and at the site of ulceration was so narrowed that the little finger could not traverse the stricture. The ulcer was very irregular, and in different places its surface was pitted with rough holes running into the walls of the tube under the mucous membrane. Lymphatics of groins over saphenous opening much enlarged, especially on the left side; they were firm but not hard, and gave the idea that the outer part of the gland had been distended, but had now collapsed and lay loosely on a very hard nucleus. Lumbar glands large, but nothing remarkable. Examined blood from lungs and spleen, and from both obtained a few filariæ. The juices expressed from the left groin gland contained filariæ in considerable abundance.—24th: The parasites referred to as having been found in the subperitoneal areolar tissue were long tape-like animals, twelve to fourteen inches long, one-eighth of an inch broad, and about one sixty-fourth of an inch in thickness. They were dead white, and moved distinctly when taken out of the body. The extremities were rather thicker than the rest of the body, and were rounded off. A hurried glance with the microscope showed one extremity to be lipped. I placed them in a mixture of

serum and urine, intending to examine them more carefully in the evening of the post-mortem, but was disturbed. Next morning I poured spirits of wine over them. To-day I find them so friable that I cannot make out the structures. There are no joints or articulations. The entire animal seems stuffed with clear globular egg-like bodies, in many of which double and treble outline, with appearance of nucleus, can be traced. These bodies are apparently held together by a loose fibrous matrix, which on pressure splits up longitudinally or ruptures transversely. The integument is very thin. One extremity appears to be provided with a narrow longitudinal slit, the other is distinctly lipped.

AMOY.

[We are informed that the tapeworm-like parasites were submitted to Dr. Cobbold for identification, and he finds that not only are they new to science, but they belong to the genus *Ligula*, hitherto not known to infest the human body. Accordingly he proposes to call the worm *Ligula Mansoni*.—ED. L.]

REMARKS ON PROSTATORRHŒA.

BY D. CAMPBELL BLACK, M.D., L.R.C.S. EDIN., &c.,
EXTRA-PHYSICIAN TO THE ROYAL INFIRMARY, GLASGOW; PHYSICIAN TO THE GLASGOW PUBLIC DISPENSARY.

THE normal function of all glands is maintained by a healthy coördination of the three divisions of the nervous system—viz., the motor, the sensory, and the sympathetic. The integrity of such coördination may be disturbed by peripheral or central influences, or by lesions of the intercommunicating apparatus. Bodily waste and repair—the persistence of healthy structure,—equally with the normal secretion of all glands, are thus dependent on a healthy nervous system, and it in turn on a healthy blood-supply. If at any of the points indicated the normal influence of the nervous system be perverted, the due circulation of blood is interfered with, and in glands one or other of the following changes take place, as certain conditions predominate.

On the Basement Structure of Glands.		On the Secretion of Glands.	
Neoplasm.	Degeneration.	Augmented or diminished secretion.	Changes in the composition of the glandular secretion.

The functions of the sexual and urinary organs may be said to be compound in respect that they are partly voluntary and partly involuntary, and that some are participated in by purely cerebral influences, while others are exclusively reflex phenomena in association with given centres of the spinal cord, and thus totally independent of the higher nervous centres. To the former belong the functions of micturition, and to some extent the special sexual functions; while to the latter are to be assigned those of the testicle, the prostate, Cowper's and the other smaller subordinate glands. The nerve centre for the sexual organs is situated in the lumbar enlargement of the spinal cord, and presuming the integrity of the centre and reflex loop, the sexual secretory functions, while they may be influenced by psychical impressions, are carried on quite independently, as all vegetative functions are. In the light of the above propositions we have seen that these functions may be deranged by peripheral, central, or intermediate influences. Under the first category are recognisable the phenomena attendant on the presence of stone in the bladder, hæmorrhoids, preputial irritation, contracted meatus, prostatitis, and varicocele; under the second two categories the phenomena arising from disease or injury to the spinal cord, and the disturbed motor conditions thereby occasioned. These, it will be obvious, comprise retention and incontinence of urine, reflex pain, a peculiar form of spinal paralysis, excessive secretion of the testicle and consequent spermorrhagia, excessive secretion of the prostate (prostatorrhœa), &c.

When several glands discharge their peculiar secretion into a common emunctory it is often difficult to distinguish how far discharges from such emunctory are simple or compound, or to what extent they are the latter. This is notably the case with the urethra, as the term gonorrhœa sufficiently demonstrates. Empirics are never slow to find out the hidden or neglected arcana of medicine and surgery, and profit thereby at the expense of the credulity or unfounded fears of their victims, backed up as they have been in the case of urethral discharges, other than gonorrhœa, by the sensational and ill-advised writings of such men as Lallemand and his followers. The frequency of urethral discharges, at stool especially, and at other times in rarer cases, did not fail to excite their notice, and they forthwith sought, and too often sought successfully, to associate such discharges with the "chamber of horrors" in which Lallemand and such as thought with him, delighted to revel, to the irreparable injury, bodily and mental, it may safely be asserted of countless thousands. As there is no system or form of quackery which does not depend for its maintenance on the kernel of truth within, the expediency of disentangling the true from the meretricious in the present instance is now sufficiently recognised, though there are still considerable differences of opinion among authorities on certain points, to one or two of which it is my present object to direct attention, record my experience, and invite discussion on the part of others whose opportunities of observation are of a more extensive nature than my own. The subject of involuntary emissions of semen is coexistent with the literature of medicine,[1] but comparatively little pathological significance was accorded to them until the ill-advised and hastily-generalised treatise of Lallemand appeared at Montpellier. Antecedent to this time happy ignorance prevailed upon the subject, and people consequently enjoyed physical and mental health. It was not until 1860, I believe, that a special discharge from the prostate gland was described by Professor Gross;[2] and in his admirable work on this and allied subjects Dr. Samuel W. Gross defines prostatorrhœa as an "excessive secretion of a clear viscous fluid, dependent upon chronic catarrhal inflammation of the tubular glands of the prostate. It is included by some authors in their description of chronic prostatitis; but it is an entirely independent disease, as it does not follow an attack of acute inflammation, nor is it attended with suppuration or other morbid changes of the parenchyma of the organ." Erichsen states that "the disease is characterised by the discharge of a few drops of ropy viscid mucus from the urethra after micturition and defecation. It is chiefly of importance from its liability to be confounded with spermatorrhœa, and from the depressing effect consequently produced on the patient's mind," and he further indicates that its diagnosis is to be effected by microscopic examination of the nature of the discharge, thereby indicating that if the discharge contain spermatozoa, the disease is *spermatorrhœa*; if they are absent, that it is *prostatorrhœa*. Professor Humphry, in treating of spermatorrhœa, remarks, "Accompanying this malady, or independent of it, there is sometimes a discharge from the urethra of a tenacious fluid, like white of egg, in small quantity, following the urine, or expelled during the evacuation of the fæces, especially when straining is required for this purpose. This symptom causes great alarm to the patient, as he believes that he is suffering from a continual escape of the semen. Such is, however, not the case. I never found any spermal elements in it. It proceeds apparently from the prostate gland; and its presence in sufficient quantity to issue from the urethra is an indication of a relaxed condition of the ducts of the gland, permitting the secretion to be expressed during the voiding of the urine or fæces." Dr. King Chambers seems to be of a similar opinion, regarding this discharge as one of pure mucus, which may go on for years without any physical or mental impairment unless the patient's mind is directed to the subject. Mr. Teevan, on the other hand, regards this as "true spermatorrhœa," and curiously enough ascribes it to indigestion. Mr. Benjamin Phillips remarks, "At one time I doubted whether this fluid were spermatic, it is usually so smooth, transparent, and homogeneous; but if it be examined under the microscope, spermatozoa *can usually* (italics writer's) be observed in it. Its thin character has induced people to think that it was a depraved secretion become watery by exhaustion of the secretory organ; and sometimes it may be so, for if a person who complains of the constant escape of the thinner fluid has an ejaculation, the fluid will be thick and grumous. It is therefore most probable that the more fluid portion of the secretion which fills the seminal vesicles is most easily pressed out; and this is a reasonable explanation of this feature of seminal discharges." Considerable diversity of

[1] I am not forgetful of the fact that Hippocrates describes spermatorrhœa and tabes dorsalis as arising from venereal excesses, Περὶ τῶν ἐντὸς παθῶν and περὶ νούσων.

[2] North American Med. Chir. Rev., July, 1860, p. 693.

opinion, it is therefore obvious, exists as to the nature of this discharge, the presence of seminal elements being denied on the one hand and affirmed on the other. Some years ago, in writing on this subject,[3] I expressed the conviction that while in the majority of instances the secretion was entirely from the prostate, yet that facts were wanting to prove that involuntary seminal emission did not so occur, and, indeed, that my experience proved the contrary. Further observation entirely confirms me in this opinion. It seems to me immaterial whether the discharge be called prostatorrhœa or spermatorrhœa (and if the presence or absence of spermatozoa is to regulate the nomenclature, the microscope will at once determine this), the main question being, whether this is a normal condition, whether it is injurious to health, its causes, and how to remedy it. I do not think it will be maintained that this is a normal condition; neither will it, I suppose, be denied that a constant drain of seminal fluid from the urethra is likely prejudicially to affect the health. In the following cases of prostatorrhœa two groups are recognisable; in the one spermatozoa existed in the discharge, in the other these elements were absent; while the apparent causes were various, and bore out the propositions enunciated at the outset of these remarks.

Case 1 came under my notice in October, 1880. I have but few notes of this case, being that of a third-year's student of medicine. Patient complained of a frequent discharge of tenacious matter from the urethra during defecation. He felt confident that his health suffered, and he desired my opinion as to the nature of the discharge. Examination of the urethra revealed a certain amount of prostatic tenderness, and the microscope the abundant presence of spermatozoa in the discharge as represented in the subjoined diagram.

FIG. 1.

I advised the passing of a full-sized metallic instrument twice a week, and tonic treatment, requesting that I should be informed if the result were not satisfactory. Not having seen the patient subsequently, nor having heard from him, I infer that his ailment disappeared.

(To be concluded.)

THE TREATMENT OF GONORRHŒAL OPHTHALMIA.

BY CHARLES BADER,
OPHTHALMIC SURGEON TO GUY'S HOSPITAL.

THE uniformly favourable success of this new treatment, and the serious nature of the disease, will, I hope, justify the publication of the following cases, which have occurred in the present year. See also THE LANCET for May, 1880.

CASE 1.—Miss S——, aged eight, when seen on Jan. 21st with Dr. Harrer, of Artillery-place, Finsbury-square, suffered from gonorrhœal ophthalmia (fifth day) of the right eye, probably through a servant with gonorrhœa using a towel in the child's room. The anæsthetic was necessary for examination, the child being most troublesome; this Dr. Harrer had to repeat each time when injecting the ointment. The purulent discharge, redness, and swelling of the lids were very great, and even under the anæsthetic only a glimpse of the lower margin of the opaque cornea was obtained. Similar examination on Jan. 24th and Feb. 7th showed the lower third of the cornea opaque. The ointment was injected once daily, and the eyelids kept bound with lint smeared over with it, changing the lint several times during the day. The left eye, which remained unaffected, was only bound up with lint and ointment, taking care to attend to this eye before the other was touched. The injection of the ointment was discontinued on Feb. 7th, when the lids opened sufficiently to see the entire cornea. When the child was seen in March, the surface of the cornea was smooth, and the opacity reduced to a small nebula.

CASE 2.—Mrs. E. B——, aged thirty-four, was admitted into the eye ward of Guy's Hospital on March 3rd, with gonorrhœal ophthalmia of both eyes. The lids of the right eye were too much swollen to admit of a view of the cornea; that of the left eye, on raising the red drooping swollen lid, was found to be transparent. The sister of the ward injected the ointment at 9 A.M. and 4 P.M. daily; both eyes were kept bound up with lint thickly covered with ointment; fresh lint was applied after each injection.—March 14th: Injection of the ointment at 9 A.M. only; the lids open fairly; the lower margin of the right cornea is opaque.—21st: Discharged. Advised to smear some of the ointment among the eyelashes at bedtime.—April 4th: All discharge ceased; right corneal opacity barely noticeable.

CASE 3.—Mr. H——, aged twenty, when seen on April 26th, 1882, with Dr. Blades of Kennington-park-road, was suffering from gonorrhœa and from gonorrhœal ophthalmia of the left eye. No inspection of the cornea was possible, the swelling and tension of the eyelids being too great; there was much purulent discharge, pain, and intolerance of light. Right eye not affected. Dr. Blades injected the ointment daily (about 11 and 4 o'clock) beneath the upper eyelid of the left eye; both eyes were kept bound up with lint and ointment.—April 30th: Less pus and swelling; eyelids of a dark blue-red hue; the lower part of the cornea, as far as visible, opaque. On receiving a telegram the next day that the right eye was also inflamed and discharging, I replied, "Inject both eyes." Five days later the discharge from the last attacked eye had greatly subsided. As the lids opened and discharge and swelling became less, the injection was made once daily, but the bandage with lint and ointment was continued. On May 25th the ointment was discontinued and weak alum lotion used for bathing. In July I saw the patient: both corneæ were clear, and the eyes well in all respects.

Remarks.—The ointment consists of one grain of the red oxide of mercury (supposed to destroy the contagious matter), of one-fifth of a grain of daturin or atropin (to combat iris complications), and of one ounce of vaseline (as the best vehicle to touch and saturate the entire surface of the conjunctiva with the remedies). In no case, however great the

swelling of the eyelids and conjunctiva, has any difficulty been experienced in injecting the ointment. For injection a small glass syringe, figured above, is used (made by Messrs. Krohne and Sesemann) with a flat nozzle, to pass readily beneath the margin of the upper eyelid. The ointment, passing beneath the margin of the upper eyelid, escapes, generally with some pus, at the inner canthus. About two drachms of the ointment suffice for one injection. No pain whatever is felt when manipulating gently.

[3] On the Functional Diseases of the Urinary and Reproductive Organs. Second edition. J. & A. Churchill, London.

AT a meeting of the Medico-Chirurgical Society of Glasgow, held on the 6th inst. in the Faculty Hall, St. Vincent-street, the following gentlemen were elected office-bearers for the session 1882-83:—President: Dr. W. T. Gairdner. Vice-Presidents: Drs. Robert Grieve and Alex. Robertson. Council: Drs. George Mather, H. C. Cameron, Robert Forrest, Lapraik, D. Maclean, J. C. Woodburn, Wm. Whitelaw (Kirkintilloch), W. A. Wilson (Greenock). Secretaries: Drs. W. L. Reid, and J. W. Anderson. Treasurer: Dr. Hugh Thomson.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv, Proœmium.

GUY'S HOSPITAL.

ACUTE ABSCESS IN LUMBAR REGION AFTER INJURY; SEVERE PAIN DOWN THE COURSE OF THE ANTERIOR CRURAL NERVES TO KNEE; FREE OPENING; NECROSIS OF LUMBAR VERTEBRA; RECOVERY.

(Under the care of Mr. BRYANT.)

FOR the notes of this case we are indebted to Mr. Kidd.

Frederick L——, aged twenty-two, was admitted into the accident ward on Dec. 2nd, 1881. Three days prior to admission he fell from a height of about eight feet upon his back. He got up and went on with his work, carrying timber, for an hour. He then left work for dinner, but felt sick. He then walked a mile and a half to the hospital, where his back and arm were strapped up. He walked home and went to bed, and stayed there until Dec. 2nd. His appetite remained good, and he took bread-and-butter and milk. During this time he felt pain across his back, down the front of his thighs, and in his knees (not down the legs). A fortnight before the accident he had pain and stiffness in the left elbow, though he could remember no injury.

On admission there was great pain in the lumbar region, with a slight swelling over the third and fourth lumbar spinous processes, and tenderness on pressure. There was pain likewise down the front of the thighs and knees. There was also a slight bruise over the left olecranon process. Milk diet was ordered.

On Dec. 3rd one grain of opium pill was ordered twice a day; milk two pints and a half. Spongio-piline, with tincture of opium, was applied to the back. He still complained of pain in the knees; movement of the knees was becoming impaired, and there was hyperæsthesia. On the 5th the tongue was red and dry. There was apparently deep-seated pus in the lumbar swelling; the swelling was three to three and a half inches long by about two inches wide. He complained of pains in his knees, but pressure did not perceptibly increase it. Next day there was retention of urine. A deep puncture was made through the muscles into the lumbar swelling, and about an ounce of pus and blood came away. There was an acute inflammation over the olecranon process of the left arm. Lead lotion was ordered. On the 7th fluctuation was detected in the olecranon bursa. The abscess in the lumbar region was further opened, and an ounce and a half of blood and pus came away. The abscess over the olecranon was opened and flaky lymph came away; an internal angular splint was applied to limb. On the 8th patient passed his urine easily. Bowels not opened since accident. A soap enema gave relief. Two days later there was a good deal of discharge from lumbar abscess, and on the 12th the pain in the knees had entirely disappeared. On the 24th the patient appeared to be nearly well. There was very little discharge from the sinus in lumbar region or over the olecranon.

On Jan. 6th the granulations at the elbow being large were lightly touched with nitrate of silver. On the 25th a piece of bone exactly three-quarters of an inch long was found sticking to the orifice of the wound. The exfoliated bone was the result of periostitis, following on inflammation of the ligaments of the lumbar vertebra, probably coming from the spine or lamina of one of the lower lumbar vertebræ. The spicules of bone were not sharp.

On Feb. 10th another small piece of bone came away from the lumbar wound. A Sayre's jacket was put on, extending from the nipple to the crest of the ilium. A square hole was cut over the wound. On the 21st the patient was discharged feeling quite well, and still wearing the Sayre's jacket. The wound in the back was quite healed. His left elbow was rather stiff, but its condition was much improved by gentle movement.

The temperature ranged between normal and 102·5° from Dec. 3rd to the 15th, it then fell to normal, and continued so.

ROYAL BUCKS INFIRMARY.

DISLOCATION OF THE FIFTH CERVICAL VERTEBRA; REDUCTION; RECOVERY.

(Under the care of Mr. T. H. CEELY.)

FOR the following interesting notes we are indebted to Mr. E. Van Buren, house-surgeon.

Charles K—— was admitted to the infirmary on August 4th with the following symptoms. The history obtained was that he had been loading hay on to a rick, and at the time of the accident was standing on the top of the rick close to the side. The hay gave way, and he fell backwards on to the ground (a distance of between twenty and thirty feet), striking himself on the back of the neck. He was picked up insensible and conveyed in a cart to the hospital.

On admission he was found to be partially insensible. The pupils were both rather dilated, but equal. There was complete paralysis of the upper and lower extremities, and the breathing was slightly abdominal. The penis was in a state of erection, and there was a desire but no power to pass water. A No. 10 catheter was passed and about a pint of urine drawn off. It was clear and acid; sp. gr. 1020, and contained no albumen. The pulse was 64, full, and non-compressible. He gradually became more sensible, and complained of great pain at the back of the neck, and he also said his arms and feet felt cold and numbed, and that he had great difficulty in getting his breath. The slightest movement of the head hurt him, and as he seemed to be improving it was deemed advisable to leave him alone, strict abstinence from all movement was enjoined, and sand-bags were placed on each side of the head. Some injury to the upper part of the cervical vertebra was suspected.

In about an hour and a half after admission the man became rapidly worse. The breathing was almost entirely abdominal and stertorous; he was with difficulty roused, and there was evidently paralysis of the glottis as fluids entered the lungs. He began to get much cyanosed, and it was but too palpable that unless something were done, and that something quickly, the lad would die. In Mr. Ceely's unavoidable absence Mr. Van Buren took upon himself the responsibility of acting.

On sitting the man up, and examining the back of the neck, much bruising was present over the cervical region, and evidently some abnormal condition of the anatomical arrangement of one of the cervical vertebræ. The seventh was prominent, and could be readily recognised; but the second spinous process above this was even more prominent still, and there was marked displacement of the vertebra. No signs of fracture could be detected, and it is certain there was none of the spinous process.

It was concluded that it was a case of dislocation which should be reduced. The nurse being instructed to steady the head, Mr. Van Buren placed his two thumbs on each side of the projecting spinous process, and with the rest of his hands taking a firm grip of the neck just above the clavicles, and commenced to apply gradually increasing pressure, the nurse at the same time elevating the head slightly. The vertebra went in with a distinct snap, and all prominence and displacement disappeared. The lad at once became quite sensible, and in a very short time the breathing gradually became thoracic. When seen two hours after he could move his legs and arms, and said he felt quite well, only a little sore behind the neck. His temperature was 100° F.; pulse 84. He had no bad symptom afterwards, and eventually left the hospital in capital health.

Remarks.—That cases of this kind are rare no one can deny. In fact, Sir Astley Cooper went so far as to say they could not occur; but that the one narrated was a case of dislocation I honestly believe. I have wished to put this case on record, because there is a great tendency to give up all hope if the neck is seriously injured. I trust this case will show there is a *dernier ressort* which may do good, and at the least can do no harm.

LIVERPOOL LOCK HOSPITAL.

(Under the care of Mr. A. BERNARD.)

THE following notes of cases of warty growths on the genitals may prove of interest.

CASE 1. *Phimosis.*—On compressing the forepart of the penis a hard mass was felt simulating induration of the glans. A few small warts at the free border of the prepuce led to the belief that the induration was due to the presence of warty growths, which was confirmed on freely dividing the foreskin, an extensive crop of warty excrescences becoming exposed attached to the under surface of the prepuce, furrow, and glans penis. A strong solution of liq. plumbi was applied for a few days with the hope of drying up the growths. As this was not satisfactory, it was decided to remove them by means of the thermo-cautery, under the administration of chloroform. By this means all the growths were carefully removed, and afterwards attended with but very slight pain for a short time. The cauterised surfaces healed in a fortnight. This patient came under notice six months afterwards, the penis showing no trace of the excrescences.

CASE 2. *Phimosis, complicated with ulceration and perforation of the prepuce, the glans protruding.*—Upon drawing the glans through the perforation a few warty excrescences became visible, fetid pus exuding. The prepuce felt very hard on pressure. The only indication was to remove the fore parts of the prepuce, chloroform being administered in this case also. On removing the prepuce a crop of warty excrescences, situated similarly to Case 1, became visible. These were all ligatured. The patient was discharged cured in fifteen days.

CASE 3.—Female patient affected with an extensive crop of warty excrescences situate on the labia majora, and extending backwards, occupying the greater part of the perineum. Removed by means of the thermo-cautery, under the administration of chloroform. Discharged cured in three weeks.

CASE 4.—Elongated left nympha extensively hypertrophied at the lower half, which was thickly studded over with hard warts. Expectant treatment with local applications having failed to restore the nympha to its normal appearance, the hypertrophied part was removed with the bistoury, the thermo-cautery being applied to the cut surface to allay hæmorrhage, which it did most effectually. This patient was discharged cured in twenty days with little to distinguish the affected nympha from the sound one.

CASE 5.—Thick warty growths on the glans, prepuce, and furrow, giving to the parts a most unsightly appearance, situated on broad bases, and of some months' duration. Removed with curved scissors, perchloride of iron being immediately applied to check hæmorrhage. This patient was discharged in three weeks with nothing to indicate his previous affection.

CASE 6.—This case was admitted to hospital on Sept. 12th, 1882, suffering from phimosis with ulceration and perforation of the prepuce, the result of irritation set up by the pus exuded from warty excrescences situated on the inner surface of the prepuce, furrow, and glans. The aperture of the prepuce was very small owing to congenital phimosis. A bunch of warty excrescences protruded through the perforation, and a small wart at the aperture. The prepuce was freely divided under the administration of chloroform, and the growths, which were numerous, were removed with curved scissors. Very slight bleeding. Perchloride of iron was applied similarly to the last case. This patient was discharged, at his own request, on Sept. 22nd, all but well.

Mr. F. W. Lowndes administered the chloroform in all these cases.

THE HOWARD MEDAL.—The Council of the Statistical Society announce their intention again to grant the sum of £20 to the writer who shall gain the above medal for 1883, essays for which must be sent in on or before June 30th next. The subject is "The best Exposition of the Experiences and Opinions of John Howard on the Preservation and Improvement of the Health of the Inmates of Schools, Prisons, Workhouses, Hospitals, and other Public Institutions, as far as Health is affected by Structural Arrangements relating to supplies of Air and Water, Drainage, &c."

Reviews and Notices of Books.

Clinical Lectures on Diseases of the Nervous System. By THOMAS BUZZARD, M.D. Lond., F.R.C.P., Hon. Fellow of King's College, London; Physician to the National Hospital for the Paralysed and Epileptic. London: J. & A. Churchill. 1882.

[SECOND NOTICE.]

IF anyone wishes to be cured of a habit of taking too narrow a view of tabes dorsalis, we specially commend these lectures to him. He will find in them due attention given to tabetic symptoms so different as optic nerve atrophy, herpes with lightning pains, a certain joint disease, and gastric crises, as well as to the two especially important diagnostic symptoms—absent knee jerk and the Argyll-Robertson phenomenon. The question as to the influence of syphilis in the causation of tabes is considered at some length. As from a therapeutical point of view this is a most important matter, we quote Dr. Buzzard's brief summary of a lengthy consideration of the facts. He says (p. 214): "Whilst it appears to me incontestable that there is a remarkable frequency of association between syphilis and tabes dorsalis, I do not think, all things being considered, that the time has yet arrived for us to draw safe inference as to the precise nature of the relation."

The following quotation gives the author's view of the pathology of "gastric crises" in tabes, and embodies, too, some facts corroborating his well-known hypothesis as to its physiology and pathology. The importance of the subject justifies a long quotation:—

"In a communication brought before the Pathological Society of London in February, 1880,[1] I made the suggestion that gastric crises depend upon irritation of the nucleus of the vagus by sclerosis. At that time I had no anatomical evidence to offer in support of the hypothesis, which was based upon the paroxysmal character of the attacks, so completely in accord with that characterising the attacks of lightning pains. It appeared evident to me that if sclerosis, which when it attacked nerves of common sensation produced pain, came to invade the nucleus of the vagus, it might be expected to give rise to symptoms like those of the gastric crises. During the meeting of the International Medical Congress in London, 1881, Professor Pierret, of Lyons, showed me sections of the medulla oblongata which he had recently made from a case of tabes with gastric crises. I was greatly interested in his demonstration that the fasciculus gracilis in immediate relation with the nucleus of the vagus exhibited distinct sclerosis. It will be remembered that the funiculus cuneatus and gracilis, which closely adjoin the sensory portion of the pneumogastric nucleus, represent the continuation of the posterior columns of the spinal cord upwards to the cerebellum through the medulla oblongata." Dr. Buzzard adds in a footnote: "Whilst this work is going through the press I note a paper by Dr. Emile Demange (Revue de Médecine, No. 3, Paris, 1882) on the 'Chute Spontanée des Dents, et Crises Gastriques et Laryngées chez les Ataxiques.' In a case marked by spontaneous shedding of the teeth (without caries), and also by gastric and laryngeal crises, histological examination of the medulla oblongata showed the greater part of the nuclei of origin of the bulbar nerves plunged in the midst of sclerous tissue. The nucleus of the mixed nerves (glosso-pharyngeal, vagus and spinal accessory), as well as the ascending root of the fifth and other structures, were evidently involved in this sclerosis. The signs of sclerous neuritis were observed in the branches of the fifth nerve."

About fifty pages are devoted to one tabetic symptom, not more than its importance deserves, to what the author calls "Charcot's joint disease" in tabes. In this country Dr. Clifford Allbutt was the first to draw attention to this morbid affection in tabes; later Dr. H. Thompson published a case; then follow Dr. Buzzard's observations. We strongly commend the four lectures on this form of joint disease to

[1] Transactions of the Pathological Society, 1880.

the attention of surgeons. They embody as important a contribution to surgery as they do to medicine. The author shows that in spite of its rarity it has as much right to be included in the symptomatology of tabes as any other symptom, whether striking or not striking. He relates several cases, and in addition makes the following general remarks :—

"Experience of these cases shows that with a striking similarity in their onset, their progress varies. In some, at the end of a few weeks or months, the swelling disappears, and the joint apparently returns to its former condition. In others, on the contrary, grave disorder remains—erosions of the osseous surfaces, creaking movements, various luxations, or even total destruction of the joint. As regards the order of frequency, it is first the knee, then the shoulder, the elbow, hip, and wrist, which are apt to be affected. Several joints may be coincidently involved."

Dr. Buzzard has pointed out that there is a remarkable frequency of association of tabetic arthropathy with gastric crises. "The cases of tabetic arthropathy that I can find recorded (including nine of my own) number forty-eight. In twenty-four there were gastric crises," (p. 266). This is certainly a very striking proportion. If further evidence confirms Dr. Buzzard's opinion he will have enriched medical science with a generalisation of great value. He believes that there is a nerve centre in the medulla oblongata concerned with the nutrition of bones and joints, and thinks the "lesion of a structure adjacent to the nuclei of the vagus may be found to explain the osseous affection in tabes."

There is another matter of great interest to surgeons as well as to physicians, Dr. Buzzard writes (pp. 273 and 274):

"It has occurred to me to see one patient in whom the presence of a stone in the bladder led me to examine the state of the patellar tendon-reflex. It was found to be absent, and inquiry elicited the fact that the patient suffered from most characteristic lightning pains. I would suggest that tabes may be an occasional source of origin of a calculus, of the kind which Sir Henry Thompson calls 'local,' in contradistinction to the calculus (as—e g, uric acid) which is of 'constitutional' origin. In many cases of tabes, at an advanced stage, there is actual paralysis of the bladder. But a certain amount of difficulty in expelling urine may be a very early symptom, dependent probably upon vesical anæsthesia and absence of normal reflex. It will often be found, on inquiry, that the patient never has the natural feeling of wanting to pass urine, and does not know when it is being voided, or when he has finished. In such circumstances, unless he contracts the habit of passing it at regular intervals, there is always the possibility of cystitis occurring from urine getting retained, and in the mucous of the bladder; in these circumstances, a phosphatic calculus may easily be formed. It is worth while remembering that a bladder trouble of this kind may be as prominent and absorbing a symptom as either the gastric crises or the optic atrophy; and if ataxy of gait be absent, the real nature of the trouble may be easily overlooked. I have but little doubt that not a few cases of atony of the bladder for which the surgeon is consulted are examples of tabes with the bladder trouble predominating." He adds in a foot-note (p. 274): "At the International Medical Congress, held in London, 1881, Sir William Gull, President of the Section in which the substance of this lecture was read as a paper, expressed his opinion that the position here taken as regards stone in the bladder was sound, and remarked that the case of the late Emperor of the French was one which, according to his belief, went in support of my view."

In Lecture XVI. he tells us that, "There is a kind of stupor which is a noteworthy feature in many cases of intracranial syphilis." After his usual clinical method, he illustrates by a case, describing the particular symptomatic condition in his narration of it. He does not glibly pass over its pathology as being "caused by syphilis," leaving the process of causation out of focus. Most syphilitic nervous symptoms are indirectly owing to syphilis, as the author believes the one he is dealing with to be. His inference as to its pathology is that the cortical substance of the brain is "starved of blood to a considerable extent" by syphilitic disease of the cerebral arteries. "We can easily conceive," he suggests, "that this starvation may stop short of death of the tissue—that is to say, there may not be absolute obstruction and consequent softening, but a state of partial atrophy." Thus it will be seen that he distinguishes, as indeed he does expressly further on, the condition he supposes to exist from that of local cerebral softening owing to actual thrombosis of syphilitic arteries. The happy fact of his patient's recovery leaves, the author admits, the pathology of the case he adduces hypothetical. The opinion of this physician on the treatment of any variety of cerebral syphilis deserves most respectful attention; we gladly give space for it. The matter is of grave clinical importance. Here is what Dr. Buzzard has concluded as to the relative values of the iodide of potassium and mercury in the treatment of cerebral syphilis. Referring to the case alluded to, he writes (p. 289):—

"B——, it will be remembered, had been taking thirty grains of iodide daily for two months, when he broke down in his brain. This drug, then, supposing the view taken of the man's pathological state to be correct, had failed to influence the new formation in the arterial walls, so as to prevent the grave consequences of narrowing and thrombosis. No doubt there is the probability that its administration was commenced too late; that changes had taken place in the growth such as rendered its absorption (which might have been practicable at an earlier stage) no longer likely to happen; and there is the possibility also that the dose was not large enough. But it is a fact, however it is to be explained, that we very often meet with this condition of thickened arteries in the post-mortem examinations of persons who have been taking iodide of potassium up to the time of their death. I have long had a rather strong impression that the iodide has comparatively little effect upon this arterial change, and that it is best to employ mercury without delay in most cases of this kind. At all events, under a really effective use of this drug (administered by inunction), the restoration to health which took place in these patients was most striking. It is not unfair to suppose, although it cannot be proved, that under its use a good deal of the new growth in the arterial walls, which had resisted the effects of the iodide, was absorbed, so that the channels of circulation became gradually liberated to a great extent."

Lecture XIX is on paralysis agitans; and since its diagnosis from disseminated sclerosis is therein carefully considered, we may say that it is partly on the latter morbid affection also. We must refrain from dwelling on more than one part of this excellent lecture. There is an entirely novel observation which is of great interest in several different ways. Speaking of the alteration of voice in one of his patients suffering from paralysis [agitans, Dr. Buzzard writes (pp. 334-335):—

"We all know that on the stage peculiarities of every kind are obliged to be accentuated for the sake of strong light and shade. When a very advanced period of old age has to be represented, the tone of voice adopted is exactly of the shrill piping character which we note in this woman, who, however, is only sixty-two years of age. Shakespeare thus refers to this character of voice in connexion with the sixth of his 'Seven Ages of Man':—

> 'His big manly voice,
> Turning again towards childish treble, pipes
> And whistles in his sound.'

Since I first noted this piping note in cases of shaking palsy I have been interested in observing whether it was common in the exceptionally aged persons, not afflicted with paralysis agitans, whom from time to time I have met. I have not found it to be so. Now, paralysis agitans, although, as Charcot has pointed out, it especially assails persons who have passed their fortieth or fiftieth year, has a slow march and little or no tendency to curtail longevity. Hence there is always to be found a certain number of persons afflicted with paralysis agitans who have arrived at a ripe old age, and who present this peculiarity of voice. I cannot help thinking that the conventional voice of age on the stage has originally been derived from the study of some

old person affected with this disease, and thence handed down, as we know is the stage custom, to successive generations of performers."

Dr. Felix Semon examined this patient laryngoscopically, but discovered no abnormality.

The rest of the work deserves as much notice as has been given to the lectures we have already remarked on, but the demands of our space leave us no choice but to do little more than mention what remains. There is no separate lecture on diphtherial paralysis, but in many parts of the work the author deals with it in a very realistic manner. There is an admirable lecture on "Ophthalmoplegia Externa, with Tabes Dorsalis," with an elaborate and excellent examination of the parts diseased, by Bevan Lewis. If anyone wishes to realise that scientific research and what Carlyle calls "practicality" may be combined without confusion, he will, by reading this lecture, see that it can be thoroughly well done. From Lecture XXIV. the reader will find that fourteen years ago (*Practitioner*, October, 1868) Dr. Buzzard drew attention to the phenomena of "transfer" induced by encircling blisters placed on limbs above the point of departure of the so-called epileptic aura. This was some years before the well-known experiments on cases of hysterical hemianæsthesia by Charcot and others. Thus Dr. Buzzard was prepared to think, from what he had previously observed himself, that such transfer was very probable, and that there were no good grounds for doubting the *bona fides* of the hysterical patients.

Abstracts
OF
INTRODUCTORY ADDRESSES
DELIVERED AT THE
PROVINCIAL SCHOOLS OF MEDICINE
AT THE
Opening of the Session 1882-83.

COLLEGE OF MEDICINE, NEWCASTLE-ON-TYNE.

ADDRESS BY DR. THOMAS OLIVER.

THE lecturer took for his subject "Medicine, its Progressiveness and Relation to Civilisation." After a few words of introduction Dr. Oliver said:—"The existence of the science and practice of medicine is a necessity. Its origin is shrouded in mystery. To understand the causes which led up to the origin of the art, you must go back with me to a time when this earth was peopled by masses of rude men and women; to a time when lawless hordes roamed about, owning no habitation but the face of nature, and bound to each other by no tie save that of the social instinct. Civilisation, or, in other words, the development of these masses, could only arise through differentiation of the individuals. ..... From the peculiar nomadic character of primitive tribes, the art of surgery must have preceded that of medicine. As, in the world of life, no development takes place, no organisation is accomplished without interdependence of parts, so, in the development of society, special men were set aside to do special work, different duties were allocated to different individuals; and each one, trying to do his own work aright, was unconsciously contributing to the improvement and elevation of his fellow-men. In the social as in the physical world, kosmos succeeded chaos, and, with the growth of society, the requirements of men became greater. From being pastoral in their habits, and predatory in their inclinations, men of the Indo-European race after a time became settlers. I am not in a position to tell you how disease originated. It is not necessary to believe with Plato that it was due to the degeneration of man, for these primitive people were living under the freest of conditions, under conditions which harden rather than lead to degeneration. It may be that disease originated then, as it does now, in repeated violation of the laws of nature, or was part of that Almighty fiat which said, 'Let there be life,' or, as moralists tell us, was a visitation for some sin. Once originated, however, it formed one phase of social life which had to be dealt with, and requiring treatment at the hands of the tribal physician. The origin of the art of medicine, then, if this summary is correct, presupposes a higher state of the social mass for its reception than the origin of surgery. Observation of disease, and the results obtained by means of the treatment adopted, led to the recognition of antidotes, and to their classification. Out of observation and experience arose the practice of medicine. From the nature of things, men were contented with results for some time before they attempted finding out the reason why. It was when the faculty of reason was brought to bear upon the questions at issue that medicine developed from an art to a science. There could not have been in those early days, more than there is at the present time in Central Africa and some of the Oceanic Islands, anything like a well-arranged system of medicine. Empiricism, trading upon ignorance and superstition, was the condition of medicine until late in the development of the Continent, and in this condition it remained until Greece asserted her influence. It is true that the early Egyptians were not altogether unacquainted with the efficacy of medicines; but, so far as our inquiry is concerned, Egypt at this period, though far advanced in civilisation, is only interesting to us as being the source whence the Greeks got their information. Simple in their manners, severe in their laws, and careful in the education of youth, the Greeks soon rose to fame. They recognised the fact that to be great they must be learned; and yet, while the Greeks recognised the great influence of culture in almost every department of life, while the nation was being consolidated at home and extended abroad, and its language becoming almost universal, the science of medicine had made little or no progress in their hands. And how was this? The rise of the nation was very rapid; plenty had too easily replaced want, and in that way damped the enthusiasm and aspirations of a noble people. The Greeks, overcome by pride and satiety, failed to push forward the good works they had begun.

"As for medicine, how could it develop? Like the other sciences, it had been carried to the temples, where, for a time, it was practised by Æsculapius and his followers. Æsculapius, who has been called the god of medicine, was a man with a wonderful reputation. With his two sons he founded a system of medicine, the followers of which were called Asclepiadæ. But, with Æsculapius, as with all founders or originators of systems, his pupils, in their attempts to further the development of that system, simply distorted it to meet their own ends. They built temples to the god of medicine in healthy situations—buildings surrounded by everything that nature could give to refresh the sight of the sick; and, internally, as in our modern hydropathic institutions, these buildings contained everything to make a residence within them pleasant and agreeable to the invalid. The external application of oil and water were the hygienic remedies employed; but, in addition, the Asclepiadæ were bold enough to make use of harsher measures when the occasion required them. These men, however, saw that they had a monopoly in their hands. Somehow or other a kind of sacred feeling came to surround these temples, wherein prayers were offered up by the priest-doctors, and fasting advised; and, recognising the influence of the moral on the physical, they took every opportunity to impress their patients that a cure to their disease could only come from the god of medicine, whose messengers and interpreters they were. Forming, in this way, a separate class, and transmitting their medical knowledge from one to another, as a family heritage, the Asclepiadæ followed their practice in profound secrecy.

"In the temples of Æsculapius, medicine made little or no progress—none, at least, so far as we know, until the Asclepiadæ revealed the secrets of their practice to those who had undergone a process of training. Medical instruction may thus be said to have originated in the temples. It could not be without its advantages to the Asclepiadæ, for the fact that their actions and lectures were criticised by younger men must have forced them to exercise the faculty of reflection. The most we can say of the Asclepiadæ is that they attempted exactness in their practice; they took notes of cases, and classified symptoms; but they seldom discussed the

origin of symptoms. That duty, and with it we may trace the rise of the real art of medicine, was left to those who rescued it from the temples, and foremost amongst the Greeks stands out Pythagoras. Close upon Pythagoras comes Hippocrates, one of the greatest writers on medicine. To him is attributed the statement that health depends upon an exact proportion of the four cardinal elements of the body—blood, bile, phlegm, and black bile, a doctrine which constituted the ancient system of 'dogmatism,' and which was taught, with few exceptions, until the foundation of the schools at Alexandria. Hippocrates was a simple observer, and an accurate recorder of facts. Amongst his pupils, however, dissensions arose. Methods and theories were thus attributed to Hippocrates which were never his.

"The art of dissection, and the facts recorded by Galen, gave a great impulse to the study of medicine. At this time, however, Alexander the Great was at the height of his glory. Successful in his wars abroad, Alexander had enriched his native country by the treasures he brought home. But it was left to one of his generals named Ptolemy to complete his work. Ptolemy recognised the secret of Grecian development, and, wishing to be great like his master Alexander, he saw that this could only be accomplished by making mind the moving force. For this end he gathered around him the intellect of the day. Philosophers and mathematicians now made their way to Alexandria, where medical schools sprang into existence, which soon eclipsed those of Cos and Pergamos. In the details of the study of practical anatomy the Alexandrians were well versed, and, for a time, all went well. As Alexandria acquired intellectual renown, so, in like degree, prospered the science and practice of medicine; but an evil day came. As in the earlier days of Greece, the people were not content to live in obedience to law, so in Alexandria, when it reached the height of fame, its statesmen and its scholars no longer observed and studied facts for themselves. The art of dissection fell into disuse, research was no longer stimulated, and science ceased to advance. It is true that Galen, by his writings on anatomy, has shed a lustre on the Alexandrian epoch. Much of his teaching, and much of the teaching of the schools was carried back again to Greece. Meanwhile, Alexandria was rapidly falling into decay. Rome, now in the ascendant, was travelling eastward. Julius Cæsar burnt the great library, and, for a while, the ruin of a marvellous city was all but complete. ..... Soon after the Mahomedan conquest of Egypt the Alexandrian library, which had been restored, was again destroyed. To the extent, however, that the Saracenic empire was enriched by the capture of Alexandria, so was that empire and the other nations impoverished by the rash order of Amrou. Mussulman princes invited men of learning to settle amongst them, and of these not a few were zealous students of Greek philosophy. Into many Mahomedan families the Jews gained access in the character of physicians. This contact refined the Mussulmans, for soon their fanaticism abated, their manners became polished, and their thoughts elevated. They ranked first amongst the commercial nations of the world, and were far ahead of all in science and philosophy. Under a system of freedom in education and physical research the Saracenic empire kept extending in every direction. Great in territory, it was also great in education, for in nearly every part of this large empire colleges existed. In the schools of medicine good work was done by these Arabians, especially in the departments of materia medica and pathology. Alexandria no longer occupied the prominent position which had been hers for centuries; but ere she entered on her decadence she gave that stimulus to progress which has not yet spent its force in Western Europe.

"It is a long time from the epoch during which the Universities of Europe sprang into existence, such as Bologna, Paris, Salamanca, and Oxford; and while it is true that for generations their work was carried on in comparative quietude, and the results of their teaching unfelt, their influence is now seen in that general diffusion of education which is the crowning glory of our age.

"Soon after the art of printing was revived, the art of engraving came into use, and, by its means, the practical study of anatomy and physiology was facilitated. With the revival of letters, physicians turned their attention to the means of preventing, as well as curing, disease. Harvey, at this time, had discovered the circulation of the blood; and, though his views were only a modification of Galen's, they simply revolutionised physiology. Like every new discovery, however, it was long in being adopted. The teachings of antiquity could not be overthrown at once. For twenty-five years Harvey maintained in the face of great opposition what is now the chief fact of physiology. Following in the train of medical discoverers, comes Malpighi, who demonstrated by means of the microscope the existence of corpuscles in the blood; then Asselli, who discovered the lymphatics—a discovery which the two Hunters showed to be more comprehensive than Asselli ever dreamt. Medicine was now a preventive as well as a curative science. The hospitals built in earlier days were no longer fit receptacles for the sick. Hygiene was not sufficiently understood to enable physicians to deal satisfactorily with the disposal of large masses of men and women. Epidemic disease had again and again played sad havoc with our soldiers and our prisoners. For the diminution of such evils as prevailed at this time we can point with true pride to the labours of one man, who made public health his special study, the welfare of his fellow-men a life's work—I refer to John Howard. Small-pox had decimated the masses on more than one occasion, and, for the diminution of its mortality, we are indebted to Lady Wortley Montague for inoculation, and to Jenner for vaccination.

"It is unnecessary to trace the progress of medicine further. With men like Cullen, Boerhaave, and Corvisart medicine made steady progress, and the close of the eighteenth century saw a system of clinical teaching revived, more brilliant and more glorious in its results than that which had fallen into disuse two thousand years previously. What medicine of the nineteenth century has done, and has still to accomplish, writers of succeeding generations may record. Much has been done; much still remains to be accomplished. Just at a time, however, when civilisation is at its highest, and scientific men had renounced everything for the investigation of the more hidden causes of disease and their means of treatment, their hands are tied by Parliamentary interference. Not to destroy life, but to save it, is our motto; and if to accomplish this the lower animals are made the basis of considerately conducted experiments, how great is the gain to man and to the animals themselves."

QUEEN'S COLLEGE, BIRMINGHAM.

ADDRESS BY DR. RICKARDS.

AFTER a few introductory remarks, Dr. Rickards gave an outline of the history of the Medical School, which was started in 1828 as the Birmingham Royal School of Medicine and Surgery. The local medical activity, instrumental in its first formation, led to the creation of a second school in 1851—Sydenham College. The two institutions, having served their purposes for many years, became in 1868 merged into one—Queen's College. In 1873, for the purposes of clinical teaching, the practices of the General and the Queen's Hospitals were amalgamated, and students were required to attend each hospital alternately for six months. This arrangement gave them the opportunity of seeing the practice of the staffs of both hospitals, and enabled them to cull their experience from the widest possible field. During the past year a change had been effected in the medical department of Queen's College. An arrangement had been made for its students to receive the strictly scientific part of their education at Mason's College. It had been urged against provincial medical schools that they were unable to offer their students advantages equal to those of the metropolitan schools, and therefore decoyed students from the best education; but Birmingham, he thought, need not shrink from comparing its school, as at present constituted, with any in the United Kingdom. There was one disadvantage under which its student who purposed taking the degree of Doctor of Medicine still laboured. He had to go elsewhere to pass his examinations, and was even obliged, in some cases at any rate, to complete a period of residence and a course of study at another medical school before he was allowed to present himself for examination. This was why the local medical profession was directly interested in the establishment of a university in the town. Already there were in Birmingham a number of institutions devoted to higher education, each with its staff of professors engaged in teaching literature, languages, mathematics, natural science, fine arts, theology, and engineering. Surely these institutions might in some way

be affiliated so as to make the possibility of a university in Birmingham no mere dream. He then proceeded to speak of education, especially in reference to the medical calling. He thought the time was coming when the teaching of natural science would take the place of that of the dead languages in the education of those who were not going to make literature their business in life. In the middle and upper class schools the boy's mind was already so taxed as to admit of no further strain. The direction of any change in his education must rather be towards altering the subjects taught than in adding to his school hours. He considered that, as regards the training of the mind to such habits as those of rapid thought, quick observation, fixed attention, sound reasoning, the teaching of natural science would surpass that of the dead languages, and that the other requisite mental training might be acquired by the study of modern literature, with the help of a knowledge of modern languages. He maintained that by the use of the dead languages as the chief means of training the minds of the young, an amount of time and brain power was expended which would be of the greatest possible value if applied to the study of subjects more directly connected with future careers. The early teaching of natural science would not only prepare the mind for a more complete study of its various branches, but would create a desire for advanced scientific knowledge and for the prosecution of scientific research. He thought that, on the grounds of political economy, natural science should not be restricted to the few, but should be widely taught in public schools. He quoted Professor Huxley: "I weigh my words when I say that if the nation could purchase a potential Watt, or Davy, or Faraday at the cost of £100,000 down, he would be dirt-cheap at the money," and remarked that the more labourers there were in the field of science, the greater would be the probability of getting a potential Watt, Davy, or Faraday. The lecturer went on to say that when a student entered a medical school he ought to have acquired a sufficient knowledge of such sciences as physics, chemistry, and biology (not including human anatomy and physiology); that the time usually spent in the medical curriculum was sufficient only for the more strictly medical studies; that under the present system sufficient time was not spent by the generality of students in the wards of the hospitals. In speaking of the modern method of clinical research, he pointed out the value of certain medical appliances. The introduction of the stethoscope, the microscope, the laryngoscope, the ophthalmoscope, the sphygmograph, the clinical thermometer, while facilitating correct diagnosis, had considerably augmented the labour of the student, and had made it imperative that he should devote more time to clinical work than formerly. But, he continued, the student had other objects in view in the wards than fitting on the medical armour for diagnosis—he had to learn the treatment of disease, and here he would find the greatest gap in the science of medicine which had to be bridged over by art. No amount of talent, no bookwork, no systematic lectures, could take the place of bedside study in learning the art of treatment. The student must watch the experienced artist at the bedside. Turning to the students, Dr. Rickards said they were on the threshold of a noble profession Other callings ministered to the wants of man when in the enjoyment of that greatest of all blessings, health; there came, however, a time when all that he possessed, all that he enjoyed, his ambition, his hopes, his plans were all under a cloud. That was the hour of sickness. It was then that they would be called upon to perform the noblest actions which could fall to the lot of man: to combat disease in all its hideous forms, to ease the pain-racked frame, to succour the dying, to console the survivors, were only some of the sacred duties they would have to fulfil. It was a profession which necessitated much self-sacrifice and even risk to life; the battlefield, the hospitals, the crowded alleys of towns, all in their different ways echoed this truth. They would have to work day and night, paid and unpaid, with appreciation and without it. It was a benevolent profession; to it many of the "medical charities" owed their origin; nor was it unmindful of its own; the medical benevolent societies might prevent any medical man, his wife, or children from being destitute. The profession, though rarely leading to the accumulation of fortunes, assured a comfortable competency to all its members, the demand and supply of medical assistance was so evenly maintained that none need be idle. He advised the students to work regularly and methodically so that they might not have to resort to the "cramming" system; they should be advised by their seniors. As to their working capacity, they ought not to overwork, squeezing two days' work into one; the midnight oil had put many a prizeman into a premature grave. He urged upon them the importance of practising putting their thoughts on paper and of cultivating the memory by learning by heart and reciting. He begged them not to let a mere diploma be the goal of their medical curriculum, but that their grand object should be to fit themselves for the grave responsibilities of practice.

LEEDS SCHOOL OF MEDICINE.

ADDRESS BY MR. JAMES WALKER,

LECTURER ON PRACTICAL PHYSIOLOGY.

ADDRESSING himself specially to the younger students, the lecturer impressed upon them the importance of recognising the fact that they had left school by beginning at once to think and act as men; nay more, as gentlemen and Englishmen. The profession they were about to join, he pointed out, adapted itself so to different tastes that a man could hardly fail to find some opening for his particular bent. After throwing out various other suggestions, Mr. Walker proceeded as follows:—"Your first two years ought to be nearly entirely devoted to anatomy and physiology, or the subjects which are required for the first professional or intermediate examination of the College of Surgeons. Anatomy, being the groundwork or mainstay of surgery, is perfectly indispensable to everyone entering the profession; and to most people, after the first natural aversion and dislike has been overcome, the subject becomes very interesting, or even fascinating, partly on account of its being so thoroughly and completely worked out and understood, for we may say that we now know nearly everything that can be known certainly in ordinary anatomy; and also it illustrates at every turn and in so many different ways, by its beauty and evidence of design, the omnipotence, and even the very existence of the Creator, if such could be necessary. It also has a personal interest to many, for I think most of us like to know as much about ourselves as possible, especially if the knowledge does not happen to be of a disagreeable kind. The only way to acquire the subject is by patient, regular, and persevering practical work in the dissecting-room. Physiology—under which head is now included, somewhat wrongly, the subjects of histology, which is nothing more than minute anatomy, and histochemie, or chemistry of the tissues—is a subject not so definite and settled at the present time as anatomy, but still so extremely necessary and of such vital importance to the medical world that one hardly knows how or where to begin to advise you for the best, and give you a liking for this most generally necessary of the introductory subjects. It is certainly, as I think no one will deny, at the very root of all treatment of disease, and the groundwork of all rational medicine. It should strike everyone that before you can treat or correct what is wrong in any subject you must know as far as possible the original and healthy condition first, or you are liable and very likely to do more harm than good in your attempts. Whether is it worse, I should like to know, for that is what the question really resolves itself into, to experiment upon living human beings—perhaps your friends and relations—which would happen generally when they are more or less helpless with their feelings, morbidly exaggerated and excited by disease; or to try to find out the same thing through the lower animals, whose nervous system is not so highly developed, and in which case nearly always the animal is rendered insensitive to both mental or bodily pain? It behoves everyone, especially the student of medicine, to look around him and acquire the habit of studying human nature for himself from the reality, and not from books or other people. I remember the late Mr. Nunneley, when I was a student, telling us in a lecture that very early in his career he formed the habit of constantly trying, as he went along the street, to diagnose and make out what ailed people as they passed, and he said that it had been to him a great help in his after-life and training for active practice, often saving much time at very critical moments. He did not do it in any spirit of inquisitiveness, but to aid and cultivate his powers of observation. And I think no one who knew him well will deny that he became a keen reader of character, an acute diagnostician, and first-rate surgeon for his

time. Physiology, as I have said before, has made such rapid strides of late that it seems to have invented or opened up to the profession, and brought very prominently before the public, many new branches for special and more extended work and research. Formerly the only specialists were the pure consulting physician and surgeon (excluding, of course, the arrant quacks who are now being bowled out of existence), and even these were hardly recognised until very recent years in this district. They certainly did not take the same place and standing that they do now. But I think the day is not far distant when the truth will be recognised that for economy of labour and to gain better results in practice it is necessary to divide the profession, which is now too wide for any one mind to grasp, into several subordinate sections. You hear men, from interested motives, exclaiming against the tendency as damaging to the profession at large; but this false and mistaken conservatism—so called—if carried too far, is liable to set up and foster all manner of foul excrescences from the profession, which cannot be got rid of without entire separation and loss to the Faculty in dignity and everything else. It should be the object rather to encourage men at the top of the profession, who have gone through a previous general training, to take up special subjects for which they may have a liking or natural aptitude, than that the public should be imposed upon by men from the other end, or perhaps outside the profession altogether. Physiology is also the foundation of all sanitary science, and so much has lately been done in this direction, and that not always the best, from ignoring or want of knowledge by the acting authorities of often the most elementary rules, that I have only to draw your attention to it and ask you (if interested) to refer to the press, both medical and lay, which at the present time teems with what are thought by their authors to be practical and useful suggestions, and abounds with addresses to learned bodies. There are so many different examining bodies open as an entrance to the profession, that it is difficult for those who do not know much about the subject to choose and settle which diploma to go in for, and especially if they have no knowledge of their value and status, or have no fixed ideas as to their probable future line of practice. It is the general rule at our school for all men to take at least the College of Surgeons' membership for the surgical qualification, and for medicine either the licence of the London College of Physicians or Apothecaries' Hall. These are very good, entitling men to practise in any branch. But I should like the Leeds School men to look upon these rather as the minimum test, and aim at higher things. There is at present, I believe, a Royal Commission sitting, taking evidence as to the quality of the different boards, which promises to do great good. It has shown so far that two of the Scotch licensing bodies or colleges, which give grand sounding titles, are, to say the least, very inferior, and easy for anyone to get, and misleading to the general public. There is no excuse, in my opinion, for our men not taking an English degree who have the means. And I hope all of you would despise the man who, in order to deceive the public in his own interests, or from concerted motives, under the term by courtesy or sufferance, would style himself doctor, or even use M.D. on his door-plate, when he has no moral right; aping at the highest honours when really he has only taken the lowest degree possible. Another rock to avoid, which fortunately now is not so common, is for young men to start practice on a single qualification, which is generally the surgical one, and never take another, the excuse being, and often rightly, that they have no time to work for it. This fault lately has been to some extent cured by the College of Surgeons and Physicians introducing the subject of medicine in one case into their examination for those who have a degree, and so giving, as it were, a double qualification; and now, before a man can get his diploma to practise, or enter his name in the Register, he must have shown fitness in both branches. Besides, there are many appointments, both public and private, where two qualifications are a *sine qud non*; so let me urge upon you the importance of not stopping your school work, as I will call it, until you are fully equipped. Men at the Leeds School cannot blame the school for want of opportunities of acquiring a good, sound, and useful professional education. The school buildings and staff have been lately added to, and made as perfect as possible for teaching, especially in the practical courses; and it is hardly necessary for me to say that with a fine institution and building like the infirmary, with its many unrivalled advantages, the staff of which is widely acknowledged to be so able, and deservedly looked up to, we should be able to keep up our former reputation, and compete favourably with any teaching institution in the kingdom."

PROFESSOR PACINI ON THE CLAIMS OF HARVEY AS THE DISCOVERER OF THE CIRCULATION OF THE BLOOD.

To the Editor of THE LANCET.

SIR,—I have recently had the honour to receive from Professor Pacini, of Florence, a letter of which I enclose a copy, together with a literal translation which I have made, omitting only the complimentary Italian superlatives. I do not doubt that you, Sir, and your readers will feel an interest in the verdict of this eminent Italian professor with regard to the relative claims of Harvey and of Cesalpino to be considered the discoverer of the circulation of the blood.

I am, Sir, yours, &c.,

Savile-row, October 7th, 1882. GEORGE JOHNSON.

[COPY.]

Illus^e. Sig^r. Prof. Johnson,—Ho letta con grandissimo piacere la sua bella Dissertazione (Harveian Oration) che ella si è compiaciuta mandarmi, circa la grande scoperta della circulazione del sangue; e dietro questa lettura ho dovuto riconoscere che la gloria di avere dimostrata questa scoperta con ogni sorte di argomenti e di fatti appartiene incontrastabilmente ad Harvey. Ello però non deve meravigliare che attualmente i più rumorosi sapienti Italiani pretendono attribuirla a Cesalpino. Che se Cesalpino ed Harvey fossero tuttora viventi, è certo che i nostri sapienti si farebbero un dovere di attribuarla ad Harvey. Ma essendo ambedue morti, è naturale che i sapienti Italiani pretendono rivendicarla per Cesalpino: ed ecco perchè l'Italia è detta ancora *la Terra de' Morts*. In prova di ciò potrei citare più di un' esempio, in cui non sempre si è lasciata parlare la verità dei fatti; come si è visto ancora ultimamente nella R. Accademia Lincei, quando questa Accademia ebbe a giudicare il famoso concorso per *Scienze Biologiche* nella seduta solenne del' 18 Decembre, 1881. Pubblichi pure questa lettera se vuole, purchè sia pubblicata tutta intera; e intanto profitto di questa occasione per mandarle, con i miei ringraziamenti alcuni miei opuscoli; mentre mi confermo con tutto il rispetto.

Suo affet. collega,

Firenze, 28 Settembre, 1882. FILIPPO PACINI.

Translation.

To Prof. Johnson,—I have read with the greatest pleasure your beautiful dissertation (Harveian Oration) respecting the great discovery of the circulation of the blood, which you have been pleased to send me; and having read it I am bound to acknowledge that the glory of having demonstrated that discovery by every kind of argument and of fact belongs unquestionably to Harvey. You ought not, however, to wonder that actually the most clamorous of the scientific Italians endeavour to attribute the discovery to Cesalpino. If Cesalpino and Harvey were now living it is certain that our scientists would consider it a duty to attribute it to Harvey; but both being dead, it is natural that Italian scientists should attempt to claim it for Cesalpino, and thus it is that Italy is still called *the Land of the Dead*. In proof of this I could cite more than one instance in which to speak the truth with regard to facts has not always been permitted, as was seen recently in the Royal Academy of the Lynxes, when this Academy had to decide the famous competition in *biological science* at the solemn sitting of December 18th, 1881. You may, if you please, publish this letter, provided that it be published quite entire. Meanwhile I avail myself of this opportunity to send you, with my thanks, some of my pamphlets, and I remain with all respect,

Your affectionate colleague,

Florence, Sept. 28th, 1882. FILIPPO PACINI.

UNIVERSITY OF ABERDEEN.—The University Court on Oct. 6th appointed the following six extra-professorial examiners in medicine—viz., Dr. James Anderson, London. Dr. John Barclay, Banff, Dr. George M. Edmond, Stonehaven, Dr. James Greig Smith, Clifton, Mr. Fred. Treves, London, and Dr. R. M. Wilson, Old Deer.

THE LANCET.

LONDON: SATURDAY, OCTOBER 14, 1882.

BEFORE leaving the subject of the Inequality of Medical and Surgical Examinations and passing on to that of the Inefficiency of the General Medical Council, it is but right to look at the Scotch view of this branch of the evidence adduced before the Royal Commission on Medical Acts. This is to be gathered from the opinions expressed by the Scottish witnesses—notably by Professor SPENCE, Dr. SCOTT ORR, Dr. HALDANE, Professor GAIRDNER, and Professor STRUTHERS. We publish to-day another part of the evidence of Dr. HALDANE, which tends to show the weak parts of other examinations than those of the Scotch corporations. These investigations into our examining system must be complete and impartial. Nobody can pretend that in any division of the kingdom this system is perfect. If that of the Scotch corporations is most spoken against, it is only fair to admit that, until recently, that of the English College of Surgeons covered a very incomplete number of subjects, and that it is still very uncertain and one-sided. Our own determination is to be impartial, and to be satisfied with no reform that does not give every conceivable guarantee of equality in corresponding examinations in each division of the kingdom. Dr. HALDANE tells us that of 191 candidates for the single qualification of the Edinburgh College of Physicians, 100 were members of the English College of Surgeons, and that of these 22 had to be rejected in the final examination, including medicine, materia medica, midwifery, and medical jurisprudence. Dr. HALDANE takes this as a proof that the examination in the subject of medicine of the Edinburgh College of Physicians is a more severe one than that of the English College of Surgeons. This is not saying very much for it. The examination of the English College is one essentially in three subjects—anatomy, physiology, and surgery. Until lately, neither medicine nor midwifery was at all adequately recognised. It is no proof of the adequacy of an examination of a College of Physicians that it rejects candidates who have obtained a surgical diploma. We accept Dr. HALDANE'S statements gratefully, as a proof of the defects of the examination in Lincoln's-inn, although they do not acquit the Scotch corporations, or explain why members of the London College of Surgeons should seek the licence, not of a London but an Edinburgh College of Physicians. Be this as it may, is there anything in the evidence of the Scotch witnesses to refute the statements of such men as PAGET, GAMGEE, HEATH, STOKER, and JACOB, &c., that men failing to pass the examinations in England and Ireland go with confidence to Scotland and succeed? Let us notice the principal replies of the Scotch witnesses, whose character could not well be higher. Professor SPENCE asked for proof, and said that he did not know of anything of the kind taking place. What more proof can be expected? It is not likely that names of individuals will be published. We confess to feeling that a gentleman who does not know of "anything of the kind taking place" must lay himself open to the charge of not having taken much trouble to make himself acquainted with facts. Surely all this conviction of English and Irish witnesses cannot be a matter of pure prejudice. We have too much respect for the memory of Mr. SPENCE to dwell further on an entirely inadequate refutation of contrary and positive evidence. We note with satisfaction his emphatic concurrence in the principle "that the curricula and the examinations should be *equal*." Dr. SCOTT ORR had two answers. When pressed with the case of a person alleged to have failed to pass the examination for the Membership of the English College of Surgeons, and then of the Edinburgh College, and who, having shortly thereafter succeeded in passing the examination for the licence of the Glasgow Faculty, was yet, a little while later, to be found an actual *Fellow* of the Edinburgh College, he admitted this might have been the case. His defence is that the same thing *might* have happened reversely. When Dr. SCOTT ORR produces such a case, beginning in rejection at the lowest examinations of Scotland, and ending in the *Fellowship* of the English College of Surgeons, he will have answered the charge; but he has not done so yet. Dr. ORR'S other point is, that if examinations are pitched too high, men cannot be got for country practice. Is it, then, the function of the Faculty and other Scottish corporations to provide men for the country as distinguished from the town? Surely this defence will not be accepted by the holders of the licence of the Faculty. We venture, in the name of country practitioners, to repudiate such an argument as—unintentionally, we are sure, on Dr. SCOTT ORR'S part—an unwarranted reflection on them. Professor GAIRDNER admits "the licensing bodies have been *weak*," but thinks there has been exaggeration. Dr. STRUTHERS, too, uses the doctrine of *asthenia*. There have been "weak points" in the corporations, and he adds: "I do not think my friends in the Edinburgh Corporations have latterly acted judiciously." These are important admissions by men with such associations with the Edinburgh Corporations as GAIRDNER and STRUTHERS. Dr. STRUTHERS thinks, however, that there are only two faults to be remedied: the first is, that one corporation accepts the examinations of another; the second, that Conjoint Boards do not exist except in Scotland. This is a strange way of refuting the charge that in Scotland, where the Conjoint Board does exist, the gate of entrance is wider than it should be, and than it is elsewhere. We cannot but regret that the representatives of Scottish universities, whose privileges and rights have been amply respected in the Report of the Commissioners, should take so inadequate a view of this question, and should feel themselves called on to defend a system which is unfair to the holders of Scotch diplomas, and seems likely to bring these diplomas into serious discredit. It would surely be more kind to the Scotch Corporations to advise them to accept, even to demand, legislation which would free them from the charge of passing the rejected of other boards—a charge of which we can find no disproof in the evidence of the Scotch witnesses.

PERHAPS there is no function of the body which plays a more important part in various morbid conditions of the abdominal viscera than the movements of the bowel; and

certainly there is none which, in its pathological relations, has received less experimental study. Uncertain inference from clinical symptoms is almost all that physicians have had to depend upon in their diagnosis, and in their endeavour to alter by treatment that which they assume to be present. As an instance, we may adduce the difference of opinion which has existed and still exists among distinguished authorities on the question whether there ever is, in morbid states of the bowels, what has been miscalled an antiperistaltic action—a question of great importance in many acute disorders.

Thanks to the well-directed energy of NOTHNAGEL, and so far as animals can furnish it, we have now some definite knowledge. He has made a series of experiments to ascertain by actual observation what modifications the intestinal movements undergo in morbid states. The experiments (described in the *Deutsche Zeitschrift f. Klin. Med.*) involved no suffering to the animals concerned. All were kept insensible by ether—dogs and cats by inhalation, rabbits by subcutaneous injection; and all were killed by division of the medulla oblongata as soon as the experiment was over, and before the return of consciousness. The method employed was that of SANDERS and VAN BRAAM HOUCKGEEST, of keeping the animal, with abdomen opened, immersed, with the exception of the head, in a one half per cent. saline solution, at a uniform temperature of 100·2° F. Under these circumstances, as the originators of the method pointed out, rest is the rule in most parts of the bowel, with the exception of the duodenum. Now and then, at rare intervals, there is a gentle peristaltic movement in the small intestine, and local irritation causes only a local effect, without producing any trace of general peristalsis. But the condition is changed at once by the presence of a quantity of gas and liquid distending part of the bowel. This is immediately moved forwards by a stormy peristalsis, a circular contraction behind it pushing the distended portion onwards to the cæcum. Sometimes, however, the movement suddenly stops, to go on again after a brief pause. It is distinctly analogous to the sudden temporary cessation of griping pain, which is familiar to most people. NOTHNAGEL can discover no cause for it, except a sudden inhibitory nervous influence, which its aspect indeed suggests.

As regards the first fundamental question—the occurrence of antiperistalsis—NOTHNAGEL entirely corroborates the statement of ENGELMANN, that the intestinal contractions may take place either upwards or downwards. But the last-named observer, experimenting with the intestine exposed to the air, was in error in assuming that peristaltic action, upwards or downwards, was set up by any local irritant. When the bowel is preserved from the air by the saline solution, local irritation causes a local constriction, if the bowel was previously at rest. Moreover, NOTHNAGEL concludes, from a series of sixty observations, that antiperistalsis never occurs in the normal uninjured intestine so long as no pathological influences are brought to bear upon it.

The effect of injections into the rectum was next investigated, the injections being of indifferent or irritating liquid, tinted with carmine so as to show how far it was sent up the intestine, and post-mortem examination subsequently showed whether it had been carried higher by any movement of the intestine itself. A small quantity of warm water (from two to five cubic centimetres) had no effect; it remained in the rectum until ejected by a contraction, or until it was absorbed. A somewhat larger quantity distended the rectum, but seemed to excite little peristaltic action, some of it escaping in consequence apparently of the elasticity of the bowel. Iced water caused constriction, which passed a short distance upwards so as to move the injected fluid up from five to twenty centimetres. Olive oil gave a similar result. Of greater significance, however, was the effect of a strong solution of chloride of sodium. A small quantity, three to five cubic centimetres, passed up, by the force of the injection, about ten centimetres. In a few minutes, however, the coloured liquid was carried upwards by a distinct ascending contraction, and the antiperistalsis gradually carried it, together with a mass of fæces, as high as the cæcum. Sometimes the antiperistalsis took the form of a series of circular constrictions, especially marked at the highest part of the column of liquid. Besides this, descending contractions occurred in the lowest part of the rectum. Similar results were obtained with injections of concentrated solutions of nitrate of potash and bromide of potassium, and weak solutions of sulphate of copper.

NOTHNAGEL found that the needle of a hypodermic syringe could be passed through the wall of the small intestine without exciting local contraction, and the minute wound immediately closed without allowing the escape of the intestinal contents. Injections of chloride of sodium were found invariably to cause contractions which passed upwards as well as downwards. In a case of ileus in the human subject he found that chloride of sodium solution has evidently the same effect as in animals, since a small coloured injection into the rectum was found after death to have passed upwards some distance above the cæcum. The fact may possibly prove of great practical importance in the treatment of intestinal obstruction. The injection of indifferent fluids of the temperature of the body had as little effect on the small intestine as on the rectum. The conclusion from this series of experiments is that when the intestine is under normal conditions, or contains only unirritating contents, the peristaltic contractions occur only in the direction from the stomach towards the anus. If, on the other hand, the contents of the bowel consist of an irritant substance, the stimulant causes contractions to pass also in the opposite direction. Nevertheless it was found that the latter only occurs when the irritant substance is introduced into the bowel in, so to speak, an unphysiological way. A solution of sulphate of copper was injected into the stomach, and quickly passed into the bowel, but, entering it thus, it caused only descending peristaltic contractions. Hence we must assume that, so to speak, preformed arrangements exist, of an anatomical or physiological nature, which determine the direction of the movement.

How does fæcal vomiting occur in cases of obstruction of the bowels? It will be remembered that many authorities, from the time of VAN SWIETEN, have asserted that it does not necessarily occur by antiperistatic contractions. VAN SWIETEN maintained that it was by the action of the diaphragm and abdominal muscles, and BRINTON urged with great ability that its mechanism must be a reflex current in the centre of the distended intestine, opposed in its direction to that of the peristaltic action. VAN BRAAM HOUCKGEEST,

and LICHTENSTERN have experimented on the subject, and were unable to discern any ascending contractions. NOTHNAGEL has made a large number of experiments on this subject. Ligature of the small intestine caused in some cases very little effect. The intestine above gradually became filled without any marked contractions, and the portion below gradually became emptied. In other cases, however, a series of vigorous contractions passed down from the stomach, and distended the part immediately above the ligature, ceasing in the distended portion, and as this extended upwards higher, the section in which the peristaltic contractions occurred became smaller and smaller, until it was reduced to a narrow segment near the pylorus. After the distension had existed for half an hour, local contractions could no longer be excited by mechanical stimulation; the intestine was evidently paralysed. In these cases there was no antiperistaltic action. In others, however, the descending contractions on reaching the ligature seemed to return up the bowel for a very short distance, and were even augmented in force just above the ligature, so that the intestine here was emptier than it was higher up. There was no regular antiperistaltic action, and after a short time these "rebounding contractions" ceased, and the distension and paralysis went on as just described. Sometimes, however, the peristaltic action quickly ceased, but the distended bowel seemed to undergo a slow imperceptible contraction, which caused its contents to pass upwards, because the ligature prevented them from passing downwards. In a series of experiments in which the intestine was ligatured through a small opening in the abdominal wall, and was returned into the cavity for some hours before the abdomen was opened, the events were found to be essentially the same. Various injections were also made into the intestine above the ligature. When indifferent liquids were injected, these were moved upwards, sometimes as much as thirty centimetres, although only by the descending peristalsis and the rebounding contractions already described as occurring just above the ligature. Injections of a concentrated saline solution, however, produced distinct ascending antiperistaltic waves, precisely similar to those produced in the unligatured bowel by the same injection, and by them the liquid was quickly moved upwards.

The paralysing effect of the distension of the bowel above the ligature, which quickly annihilates its movements, throws an instructive light on the well-known injurious effect of purgatives in cases of intestinal obstruction. As they increase the peristaltic contractions, they carry the contents of the intestine more rapidly to the neighbourhood of the obstruction, and so more quickly bring about the paralysis which follows distension.

The results of these experiments are certainly opposed to the idea that faecal vomiting is the effect of any regular antiperistaltic contractions. These were only observed as the effect of the presence of irritant substances in the bowel, and the only condition in man to which this observation can fairly be applied is that in which irritating aperients, such as croton oil or colocynth, have been given. The simple diffusion of liquid contents causes their slow extension upwards, and a still greater effect is produced by the rebounding contractions, but the influence of both these was too slight to allow them to be regarded as the cause of faecal vomiting. The conclusion of NOTHNAGEL therefore is that this symptom results indirectly by the mechanism which VAN SWIETEN rightly assumed. To some very instructive observations of NOTHNAGEL on the movements of the intestines in other morbid states, we must return on another occasion.

ALL error has truth for its starting-point, and underlying the wildest flight of fancy there is to be found a solid substratum of fact. The philosophy of BERKELEY, antithetical as it is to the prevailing belief in matter as the sole embodiment and source of force, has so much truth in it that only the narrow-minded or unreflecting can wholly reject or disregard it. To the intelligent student of the so-called "medical sciences," and to the practising physician, Berkeleyism supplies the only key that will unlock a world of mystery, and the only guiding principle in the interpretation of a multitude of obvious but unsafe inferences. Translated into the language and terminology of contemporary schoolmen, the essential principle of this system of philosophy may be said to consist in the recognition that the external—as it stands related to our consciousness, whether through the mental or the physical senses—is the reflection of our own conceptions. What we see, hear, smell, taste, and touch are not—so far as we are concerned—the things themselves, but our sensory notions or impressions of them.

Between us, the internal; and the objects that surround us, the external, the very existence of which BERKELEY first doubted, then denied, there intervenes a halo or cloud—the personal environment through which all impressions are transmitted and have to be received; and by which every impression is modified, so that when it reaches the mind, and becomes a conception, it only more or less faithfully represents the external, but is never its true counterpart. This is what happens to that which comes to us through our environment. On the other hand, what leaves us is, so to say, projected upon the mirror-like inner surface of the mental and sensory medium that surrounds us; and just as every pane of window-glass plays two parts in relation to light and its pictures, transmitting and reflecting, so that we see through it, and at the same instant see our own reflection on its surface, so in looking at the external through our environment, we see surrounding objects—albeit distorted by our medium—and at the same moment see our own ideas of fact superimposed upon the external and mingling with it in such fashion that it is difficult, sometimes impossible, to distinguish between the true external and the projected imagery of our own mind-chambers.

There is something more in this than merely "seeing things through our own spectacles," as the phrase goes, because what we see is, in part at least, not an object but a reflection of self contributed by our "environment." The existence of such a halo or enveloping cloud of consciousness as we have termed the "personal environment"—in a special sense,—cannot be doubted as a subjective experience, although some may be inclined to reject it as a scientific proposition. The personal environment—call it what we may—of the child is blank, and yet it strangely distorts his vision of the external. As time rolls on and his education by surroundings is advanced,

the horizon of his perception extends, and his strength of view becomes greater, but the projections of his own thought and fancy multiply, and these stand pictured on the medium through which he looks at the external, so that the life of relation is really a life of experience, and experience is always a thing of self, and determined by the way things affect us rather than what they are in themselves.

It follows that, in a very real and practical sense, for ourselves and others, both subjectively and objectively, we need to analyse every impression or description of an impression, with a view to distinguish between the actual and the imaginary. This is not an easy, and it will often prove a very onerous, duty to discharge, but it is one which must be performed at any pains or cost, if we would avoid being deceived and deceiving others. In the study, in the consulting-room, at the bedside, in the laboratory, or in the post-mortem room, in scientific investigation, and in practice, it is indispensable to be severely scrutinising and to keep the inevitable, and in a way natural, mingling of the real and the unreal always in mind, if we would be accurate. It follows also that what we have called the "personal environment" is the source and field of impressions and visions which are ideal although they seem actual. Failure to recognise this fact makes otherwise intelligent and truth-loving minds the victims of self-deception in the matter of many of the occult phenomena—for example, those of spiritism, mesmerism, hypnotism, metallo-therapy, and the host of half-truths distorted and transmuted to errors by the intervening influence of the environment with its mental reflections and sensori-motor reflexes.

It is absurd to suppose, and vexatiously wanton to assume, or try to prove, that all the believers in these "isms," which have done, and are still doing, much to retard the progress of rational science, intentionally deceive either themselves or others. They are simply persons who, from the habit of their intellectual and mental work — using the latter term in its broadest sense—do not recognise the existence, and therefore make no allowance for the influence, of the enshrouding medium which interposes between every consciousness and the external. Ghosts, spirits, waking dreams, dozing dreams, sleeping dreams, and any and all of the objecto-subjective phenomena of consciousness, whether in health or disease, may be real—as real as anything can be—to those by whom they are witnessed or experienced.

The student or practitioner who does not perceive and—which is more to the point—bear constantly in recollection these facts about mental reflection can never be quite safe as regards his own impressions and the use he makes of descriptions of impressions; nor can he be a perfectly trustworthy reporter of experiences and observations for the information and guidance of those with whom he is associated. It is always timely to raise a warning cry in presence of the peril of errors growing out of truths; but it is especially seasonable to call attention to the subject at the commencement of a new session of study and clinical work, in the course of which we are sure to be treated to the narration of divers marvels. It would be well if we could incorporate a spice of Berkeleyism with the crude materialism of what is now deemed rational medicine.

THE Royal Victoria Hospital, the great invaliding hospital of the British Army, was established shortly after the termination of the Crimean War with a view to supply a want which was greatly felt, of a hospital for the reception of the sick and wounded during war, and of men sent home as invalids at all times. The accommodation provided at Fort Pitt, the previous invaliding hospital, was found to be quite inadequate to the requirements of the army, and its situation in the midst of a large garrison like Chatham was attended with many serious drawbacks. After much consideration and a good deal of opposition, the situation where Netley Hospital now stands was selected, and the present building erected to accommodate about 1000 invalids, and also to provide a training school for army medical officers, where, on entering the service, they might be taught those special subjects bearing upon the health of troops serving abroad, and the duties—surgical and sanitary—devolving upon them when employed with an army in the field. The importance of such an institution can only be appreciated by those who have had an opportunity of watching its working. The careful treatment of sick and wounded by the experienced officers composing the staff, and the valuable instruction received by the junior officers and the surgeons just commencing their career in the army, fully justify the expectations which were formed by those to whom the establishment owed its origin. A few years ago the discharge depôt for time expired men was removed from Chichester to Netley, and the anomaly was created of an establishment of unemployed idle soldiers within the walls of a hospital intended only for the care of the sick. Happily this has now been abolished, and the building is again employed solely for its original purpose. On the outbreak of the recent war every preparation was made for the reception of the wounded and sick who might be sent to England from Egypt. Quarters were fitted up in the hospital for the reception of twenty-five officers, and, by the removal of the time-expired depôt, accommodation was provided for 978 men. When a vessel containing invalids or wounded arrives at Portsmouth a special train for Netley is provided, and an intimation sent by telegraph of the probable time at which it will arrive, and the number of men it will convey. An ambulance and stretcher party, proportioned to the numbers intimated as coming, is in attendance at the Netley station on the arrival of the train, and the patients are removed expeditiously and comfortably to the hospital, under the superintendence of the principal medical officer assisted by the medical staff and the officers of the Army Hospital Corps. On arriving at the hospital they are immediately told off to their respective wards, where beds are ready for those who require them, and where they at once receive such nourishment and attention as may be deemed necessary for them. There have already been thirteen officers and 839 men admitted from Egypt. Upwards of half the former and above one-third of the latter have been cases of wounds, and the remainder medical cases, consisting chiefly of dysentery, sunstroke, and debility from the hardships undergone in the field and from climate, and there have also been several cases of typhoid fever among them. Of the surgical cases many have been severe gunshot wounds, which, however, under the judicious and careful treatment of Professor LONGMORE, have as yet done well. We are informed that in the treatment of these cases Listerism

is carried out in its most minute details. We regret to learn that when the discharge depôt was removed from Netley, the military staff was not removed with it, but the Commandant and Assistant-Commandant were left, with apparently nothing to do. The system of dual government by a military commandant and a medical chief in a hospital cannot fail, like all dual governments, to prove injurious to the best interests of the sick, and subversive of the efficient and harmonious working of the establishment—a point of immense importance to the patients; but we understand it has been decided that the dual government is to cease.

Annotations.

"Ne quid nimis."

THE VACANT EXAMINERSHIP AT THE ROYAL COLLEGE OF SURGEONS.

ON Thursday next the Council of the Royal College of Surgeons will elect a member of the Court of Examiners to fill the vacancy caused by the resignation of Mr. Birkett. This gentleman, who has occupied a seat in the Court since the year 1872, will not seek re-election. Four actual or probable candidates are already spoken of—namely, in order of seniority as Fellows of the College: Mr. Thomas Bryant, of Guy's (1853); Mr. George Lawson, of Middlesex (1857); Mr. Christopher Heath, of University College (1860); and Sir William MacCormac, of St. Thomas's (1871). Mr. Bryant and Mr. Heath, like all the existing members of the Court of Examiners, are members of the Council. Whether this fact will in any degree lessen their otherwise strong claims will depend on the view which the majority of the Council may take as to the expediency of selecting, as far as practicable, examiners from among the Fellows who are not members of the Council. There is much to be said in favour, not only of keeping the Court of Examiners more or less independent of the Council, but also, on the other hand, of obviating a preponderance of examiners in the Council. It has happened more than once within the last twelve months that the examiners have, by dint of numbers, forced measures upon the Council that were opposed by a respectable minority of independent members. As there are ten members of the Court of Examiners and only twenty-four members of the Council, it is never difficult for the examiners, by combination, to gain a victory in the Council, even against a strong opposition. This is obviously undesirable, though not altogether avoidable. Those Fellows who are most likely to make good examiners are sure, sooner or later, to find their way into the Council; and it would be eminently unwise to push the principle of independence and separation so far as always to refuse to elect a candidate to the Court of Examiners because he was already in the Council. In the present instance, however, the principle may be carried out without any disparagement of the undeniable merits of either Mr. Bryant or Mr. Heath. Mr. George Lawson has for many years been successfully engaged as a teacher and lecturer on surgery at Middlesex Hospital, and has had considerable experience as an examiner in surgery at the Royal College of Physicians. Sir William MacCormac is so junior a Fellow that his candidature may be taken rather as a forecast of his future expectations than a declaration of his immediate intentions.

A CHARGE OF MANSLAUGHTER AGAINST A MEDICAL MAN.

CONSIDERABLE interest has been excited by a charge of homicide by imprudence, preferred against Dr. J. D. M. Coghill of Colombo, in having caused the death of Mr. Stephen Rowan Aitken, by negligently and without due caution prescribing and causing to be administered certain medicines. From the evidence, it would appear that Mr. Aitken, who was thirty years of age, had been under Dr. Coghill's treatment for tapeworm for nearly three months. A number of remedies had been prescribed, and had failed to bring away the head of the worm, although they had given rise to considerable intestinal disturbance and irritation. For nearly two months no joints were passed, and it was hoped that the treatment had proved successful. Some eight or ten days before his death Mr. Aitken called on Dr. Coghill, told him he was again troubled by his old enemy, and begged that something more might be done towards effecting a cure. He said he would begin taking medicine on the following Sunday morning. He was given a prescription, of which the following is a copy:—"℞ Ext. æth. filic. mas., 1½ oz; pulv. kamalæ, 3 drachms; pulv. granati rad., 3 drachms; mucil. acac., syrup simp., q.s.; aq. cinnam. ad 4 oz. Half to be taken at bedtime, and half at 2 A.M." The chemist having no powdered pomegranate root in stock, communicated with Dr. Coghill, and the prescription was made up without it. It appears that he noticed the large dose of male fern, but thought it might be dispensed with safety. About 11 o'clock on Sunday morning Mr. Aitken wrote to Dr. Coghill saying that he had taken the first half of the draught, and that it had caused him a good deal of distress, but he had passed nothing but a few joints. He wanted to know if he might take the other half, and an answer was returned that he might do so. A little later he sent again, saying that he wished to see Dr. Coghill at once. He was seen at two o'clock, when it was found that he had been purged and had vomited a good deal, but had not been able to eat anything. He had passed a large quantity of the worm, which he had placed in a finger-glass in spirit. He was ordered chicken-broth and beef-tea and brandy, to be taken frequently in small quantities, and directions were given that he should be kept warm. He was seen again between 7 and 8 o'clock the same evening, and was then not so well. He had been again purged and had vomited, and was complaining of cramps in the hands and toes. He had some champagne, and a large mustard poultice was applied to the pit of the stomach, with hot-water bottles to the feet. He seemed soothed, and said he should be better if he could get some sleep, but the pain in the stomach kept him awake. He was given a hypodermic injection of a quarter of a grain of morphia, which afforded him speedy relief. He fell asleep, and directions were given that he should be awakened in two hours for some more chicken-broth and brandy, and that this should be repeated at intervals during the night. From the statement of the friends it appears that at a quarter to twelve he was bathed in perspiration and was very drowsy, but with much difficulty he was made to swallow a cupful of chicken-broth. About half-past one Dr. Coghill was sent for hurriedly, and on his arrival found the patient dead. He gave a certificate that he died of "choleraic diarrhœa," and expressed an opinion that it was induced chiefly by the weather, although it was possible that the irritation resulting from the treatment had rendered him predisposed to such an attack. The pupils after death were widely dilated, and this was accepted as evidence that the morphia could not have exerted any injurious effect.

The post-mortem examination was made by Dr. Carbery, who found general venous congestion of all the organs, including brain, heart, and lungs. The right side of the heart

was filled with blood partially clotted, the left side being empty. The stomach was empty, and at the cardiac end there was a congested patch, about three inches in diameter, covered with small lines of extravasated blood. The outer surface of the small intestine was of a rose-red colour, and the mucous membrane was marked with patches of congestion, with slight extravasation, particularly in the first three feet. Other patches of minute extravasation were scattered through the intestine. The mucous membranes of the stomach and intestines were smeared with a dark-brown fluid having a smell of ether. Curiously enough, there was only one kidney, the right, which was about twice the normal size.

Several medical witnesses were examined, and they were unanimously of opinion that the dose of male fern administered was poisonous. Dr. Coghill, on the other hand, according to the report upon which we are dependent for the facts of the case, said that he had previously given six drachms without ill effect, and maintained that the dose was not excessive, giving as his authority for the treatment Dr. William Brinton, of London, as quoted in the last edition of "Napheys' Modern Medical Therapeutics." The explanation was considered satisfactory, and the accused was discharged, the verdict at the inquest being that "deceased died from exhaustion produced by irritants considered necessary for the treatment of his case."

The case, as we have said, presents many points of interest. The use of the rhizome of ferns as a vermifuge was well known to the ancients, and is referred to by Theophrastus, Dioscoroides, and Pliny. It was also administered during the Middle Ages and had a place in German pharmaceutical tariffs of the sixteenth century, as well as in Schröder's Dispensatory. It is the active ingredient of most quack remedies for tapeworm. Peschier of Geneva was the first to employ the ethereal extract as a substitute for the bulky powder of the root, but it was not till about 1851 that it was generally employed in this country. The ordinary dose of the preparation is a drachm, and we find no record of its having been previously administered in the heroic doses recommended by Dr. Coghill. The prescription as given in Napheys' Therapeutics is clearly a mistake, the word *ounce* having been substituted for *drachm*. The original prescription was not by Dr. William Brinton at all, but occurs in a paper by Dr. John Brunton, published in the *Glasgow Medical Journal* in 1835, the dose being one and a half drachms, not ounces. Had his directions been followed no harm would have ensued. It is no easy matter to apportion the blame in this unfortunate case. A grave responsibility undoubtedly rests with the editor of the work in question, and immediate steps should be taken to notify the occurrence of this lamentable error. At the same time it is difficult to understand how a medical man could blindly copy a prescription from a book without first ascertaining the correctness of the dose.

THE INCREASING COST OF LUNATIC ASYLUMS.

IT is unreasonable to complain of the increased cost of maintaining asylums for lunatics, and of feeding and clothing their inmates. The spirit of the times has tended, and is still tending, to the multiplication of comforts in asylum life. What were deemed luxuries ten years ago are now classed as necessaries. If Mr. Hibbert had taken the trouble to recognise the rise in prices generally, and to estimate the additions made to the appliances of asylum life within recent years, he would not have expressed surprise on finding a large increase *pro rata* in the decade 1871–81. The only wonder is, that the increase is not greater, even making very little allowance for the increment of the population as a whole and, of course, of the insane in proportion.

NOTIFICATION OF DISEASE IN LIVERPOOL.

THE Health Committee of Liverpool have received a deputation of medical gentlemen on the subject of the notification of disease. The chief speaker was Mr. Carter, who made some statements which were most satisfactory, and others which do not seem to us so happy. Mr. Carter said that they were as anxious as the Committee for the public health, and that they had no sentimental objection to notification. Their objections were entirely based on experience. The experience he referred to was twofold, and to this effect: that in the places where notification was in force there was a concealment of disease on the part of the poor in the first place, and a friction between the profession and the sanitary authorities in the second. There is something in these arguments, but not so much as our friends in Liverpool think. There is sure to be at first some evasion of a law so new, and in its naked form so inconvenient; and until medical officers of health learn to consider their brethren in practice a little more, there will be occasional friction. But these will become less and disappear under the educating influence of a good system of notification by the householder, who will not be required to notify until the medical attendant is fully satisfied of the existence and nature of an infectious case. Mr. Carter was entirely right in calling for a Parliamentary discussion of this question, and demanding that it should be dealt with in a general law. It is intolerable and unworthy of Parliament that it should be dealt with furtively in local Bills, often ostensibly introduced for other purposes. We cannot compliment Mr. Carter on his last argument: that, in the event of compulsory notification, medical men will be induced, from humanitarian feelings, to give inexact certificates. This argument was illustrated by the statement that, though drinking kills from 40,000 to 50,000 persons annually, only 600 deaths are attributed to it by the Registrar-General. This is not much to the point, and is not very complimentary to the profession. Medical men return a drunkard as dying of disease of the liver or kidney, or what not. This is the cause of death. The cause of the disease is another question, on which the State has not asked medical men to be explicit in their certificates. The compulsory notification by parents of the nature of a disease that is dangerous to others is a very different thing from the publication of an opinion as to the cause of a disease that is only dangerous to the person affected. Besides, there is no shame in having an infectious disease, such as there is in having delirium tremens or alcoholic cirrhosis.

RAPID BLANCHING OF THE HAIR IN NEURALGIA.

IN the *Revue de Médecine* (September) Dr. Raymond records a case which must be added to the list of others more or less well authenticated, where the curious phenomenon of the sudden blanching of the hair has taken place under the influence of profound nervous disturbance. He prefixes to his record the *ex cathedrâ* statement of Kaposi in Hebra's treatise, who relegated all such reported instances to the region of fable, owing to the impossibility of accounting for such decolouration on physiological grounds. However inexplicable, such facts as Dr. Raymond's cannot be gainsaid. The case in question was that of a lady whose hair was abundant, and of a black colour. Although emotional and nervous, she had never been attacked with hysteria, and enjoyed good health until July, 1881, when she began to suffer from insomnia, only relieved after sea-bathing at Arcachon. In January she was again much affected by a considerable monetary loss, became restless and sleepless, and lost her appetite, and about the same time began to suffer from neuralgia. The catamenial flow was arrested at the time of the mental shock, and had not recurred. She was seen by Dr. Raymond on the 27th January, when she complained

of great weakness and of pains in the head, abdomen, shoulders, and legs. Nothing abnormal was observed in these regions. The pain was not only continuous, but was marked by frequent and violent exacerbations. Spots of tenderness were detected in many parts of the face and head, as well as over the shoulders, the first and second dorsal spines, and on the arms and legs. There was also tenderness in the ovarian region and in the abdomen. Quinine, then aconitine, and on the 31st bromide of potassium were prescribed in succession without relief. At half-past nine in the evening of the 31st the pains in the head were extremely severe, and morphia had no effect. At 2 A.M. the pains were at their maximum. At this time the hair had its normal colour. At 7 A.M. she was found with her hair nearly completely decolourised. The black colour was preserved only on the sides and back of the head, elsewhere the hairs were of nearly a bright red, a certain number (especially of the smaller hairs) being perfectly white. In some parts there was a considerable admixture of white and red hair. In other parts of the body no change in the colour of the hair had taken place. The pains persisted throughout the day, but ultimately some sleep was obtained by large doses of bromide. In two days' time most of the red hairs had become blanched, and a large quantity fell off. The neuralgia had now abated, and her general health improved, but with almost total loss of hair, a few white, red, and black hairs remaining on March 30th in the temporal and occipital regions. Dr. Raymond remarks that the phenomenon is evidently to be explained by the profound disturbance of innervation produced in the first instance by a severe mental shock, characterised by neuralgia, especially of the scalp, and culminating in the decolourisation of the hair when the neuralgia was at its height.

THE BELFAST MEDICAL SCHOOL.

THE Royal Hospital, which undertakes the entire clinical instruction of the students of the Belfast Medical School, has up to the present been without efficient special departments for the treatment of diseases of women and children, and diseases of the eye, ear, and throat. The committee has accordingly proposed to open special departments in these subjects, at which their students can receive proper instruction in these more special forms of disease. But a serious difficulty has presented itself in the form of a want of proper space and funds. This has occasioned a counter proposal, to the effect that the six special hospitals at present existing should be amalgamated with the Royal Hospital for clinical purposes, and thrown open to students. To judge from comments in the lay press this proposition promises to meet with considerable support. There can be no doubt that special departments at general hospitals are far more worthy of support than are separate hospitals for the various special classes of disease. There is a great saving of money in having all under one management; there are great advantages to the patients in attending where they can be thoroughly treated, rather than at a special institution where a single local ailment, often but a part of the real disease, is treated; there is also a saving of time and labour to the students in receiving all their clinical instruction under one roof. The best form of amalgamation of the Belfast hospitals would no doubt be a complete one, in which all should be placed under one common governing body and all the funds entrusted to one treasurer. Failing this, however, an arrangement by which the Belfast medical students can receive instruction at all the hospitals is undoubtedly a wise one, but care should be taken not only to give the privilege, but to insist on the students availing themselves of it; and also to ensure that the instruction at the special hospitals shall be regularly and systematically given; and for these ends the medical school authorities ought to have representatives on the committees of these special hospitals. We trust that some steps will be taken at once to supply the serious want there appears to exist at present in the Belfast Medical School, and that, at any rate during the present session, the students will receive proper clinical teaching in the important subjects of the diseases of women and children, and of the eye, ear, and throat.

LIME-JUICE.

THE question as to the respective merits of lime-juice and lemon-juice as antiscorbutics is frequently brought forward for discussion. Lime-juice is used exclusively in the Royal Navy; lemon-juice almost generally in the service of the mercantile marine. Practically, we should say the antiscorbutic value of the two juices would be the same if both were used freshly expressed from the fruit; but there is no question of the vast superiority of the lime-juice served out to the ships of the Royal Navy over the average specimens of the rival juice found on board the majority of our merchant ships. Why this should be so it is difficult to determine, for we see no reason why lemon-juice should not preserve as well as lime-juice, if equal care were taken with its preparation. Two objections formerly urged against the introduction of lime-juice into the mercantile marine were its expensiveness compared with lemon-juice, and the difficulty of obtaining a regular supply. Both these objections have ceased to exist. The growing favour with which lime-juice has been received by the general public, as an ordinary beverage, has encouraged the cultivation of the fruit to a large extent, so that ample supplies now reach us from Montserrat and the West Indian Islands to meet the increased demands. Whilst considering the rival claims of lime-juice and lemon-juice as antiscorbutics, we must not forget that their employment is to a certain extent a reproach on our carelessness with regard to the dietetic conditions under which our sailors subsist at sea on long voyages, since the use of lime-juice or lemon-juice indicates that the dietary employed on board ship is an artificial one. In spite of the vast improvements that have taken place in naval architecture, and in the comforts and luxuries afforded to passengers in the magnificent ocean hotels that our steamships have become, little change for the better has been experienced by the common sailor; indeed, in many cases, we believe his lot to be far harder than in the days of the roomy sailing ship, and before the introduction of lime-juice, when owners relied more on the quality of the provisions to prevent an outbreak of scurvy than at present; now they have this sure agent to hide their shortcomings in respect of the food supplied. There ought, however, to be no difficulty in providing sailors with a daily supply of fresh provisions even on the longest voyages. Fresh meat preserved in tins should not be more difficult of carriage than salted; indeed, if properly managed, it is less so, since the weight and bulk of the added salt are avoided. The question of a constant supply of vegetables is a more difficult one, since their efficiency when dried and preserved is somewhat limited, but this might, we think, be overcome by using vegetables cooked on shore and preserved in tins. At present the supply of vegetable food served out in any form is certainly inadequate considering the ease with which both in the dried or tinned form they can be procured. It is to be hoped that ere long the Legislature will devote some attention to this important point. We are now able to bring to our shores fresh produce in the shape of meat, fish, and fruit from distant regions. It is not unreasonable to insist that our sailors should participate in the benefit thus conferred on our land population, and that the same agencies employed in the preservation of fresh articles

of food during their transit on long sea voyages for use on shore should be available for the sailor as well. It took nearly two hundred years to enforce the fact that lemon- or lime-juice was a preventive of scurvy; we hope a shorter period will elapse before the lesson is learnt that it is possible by an improved dietary to do away with the necessity for the employment of that agent at all.

A WORD FOR TOBACCO.

IN a pleasantly chatty article, which takes us to Paris, Jules Noriac, Henri Mürger, and *la vie Bohémienne*, the *Daily Telegraph* of Monday last incidentally refers to the views upon tobacco expressed by the late Dr. Anstie. "The effect of tobacco-smoking in moderation," Dr. Anstie writes, "on the majority of persons who are skilled in the use of the pipe is a marked increase of stimulation, the pulse being slightly increased in frequency and notably in force, and the sense of fatigue in body or mind being greatly relieved. This stimulation most assuredly is not followed by depression. On the contrary, the smoker seems lighter and more cheerful, and the pulse maintains its firmness, in many cases for an hour or two, and even then yields to no morbid depression. Where depression is produced, it is produced early, and is a sure sign that even the small dose is too much for the smoker's constitution, and that he had better not smoke at all." It is refreshing to come upon this sensible language in these days. We live in times in which the custom is to denounce as deleterious everything which happens to be pleasant. Man could probably live without tobacco, as he certainly used to live without clothes; but the fact that both these luxuries are in the nature of comforts should not necessarily spur us into antagonism against either of them. And so it is with the question of alcohol. If Anstie's little book, "On the Uses of Wines in Health and Disease," published by Macmillan, were generally read, a great deal of the prejudice existing upon this subject would give place to views which would not be the less sensible because they represented unprejudiced examination of the question from a physiological standpoint, freed from the bias which moral considerations dependent on the weakness of human nature must necessarily introduce.

FEVER IN THE COUNTRY.

WE have frequently occasion to refer to the dangers undergone by families who spend a month or more during summer in country quarters. A lurking but fatal foe, and one about which, perhaps, they had scarcely cared to inquire, finds a fertile field, and, through one fever or another, the holiday time is changed into a time of mourning, or of grave anxiety. Certain remedies are proposed for this state of matters, and severe measures may be necessary with those who, in letting houses or rooms, purposely conceal the recent existence therein of infectious disease. Yet it is likely that a large part of the evil is due to ignorance and supineness rather than cupidity. In many cases where infectious diseases have become endemic the knowledge of, or even interest in, the laws of health, is simply non-existent in the minds of the lower classes of the population; whereas their only educated advisers on general subjects are either equally ignorant on this matter, or are so anxious to point another moral, that physical causes are completely overlooked, and the epidemic or "visitation" only ends when suitable material for its spread is wanting. What seems needed in rural districts especially is some educational machinery by which the now well-known principles guiding the spread of infectious diseases may be made more quickly to penetrate the mass, that they may no longer stand aside with folded hands while the poisons find their way, not only by atmospheric pollution, but by a complete soaking of the soil around and consequent contamination of their water supply and sewerage system, into their whole environment. The amount of literature dealing with sanitary matters now falling into the hands of working-class country readers is quite insignificant, while they continue to be so deluged with religious tracts that their distributors are often looked upon as little short of nuisances, and their influence for good diminished to a corresponding extent. Were short and plain statements regarding ordinary hygienic laws as often found in the reticule of the philanthropic lady on her rounds of mercy as is now the ubiquitous tract, we could promise the fair distributors that amount of success which they now fancy so difficult of attainment. That cleanliness is next to godliness is a text which may yet afford material for many quiet remarks, and that cleanliness in the presence of infectious disease can only be attained by the complete destruction of the causative germ, is a lesson which needs wholesome enforcement. In many country districts the surroundings of the people are so deplorable as to render the presence of fever a quite normal state of matters; Providence is looked upon as sole agent in the outbreak, and interference is looked upon as impiety. Health officers and local authorities have done much; but were the evil sufficiently understood we do not doubt that philanthropists would be found ready to do a work similar to that so abundantly undertaken in the cause of temperance, and by missions of various kinds to the poor. We want "Sanitary Societies" of far less pretence than those which meet autumnally, and treat us to such eloquent but frequently futile harangues; societies embracing in their membership large numbers of the people, from among whom would be chosen men and women sufficiently advanced to act as leaders, yet with humility enough to enter the houses of the poor, and to demonstrate there the value of those simple laws which are so often forgotten by the transcendentalists.

INTERNATIONAL DEBATE ON ALCOHOLISM.

IN the Second Section of the Geneva Sanitary Congress, Dr. A. L. Roulet, Councillor of State of Neufchâtel, urged the necessity of international organisation to obtain more precise data on the effects, direct and indirect, of alcoholism. Similar statistics are required from each country as to the amount and quality of alcohol consumed, the nature of the drinks most popular, and the criminal and medical returns in connexion with drunkenness. Dr. Roulet proposes to collect all the laws of every country affecting the sale of spirits and the repression of drunkenness, and suggests the extension of those measures of propaganda which the Temperance Societies have rendered so familiar in England; but he concludes by asserting that no measure against alcoholism will produce any serious result till some chemical test has been discovered which will enable us to estimate rapidly the quality of alcohol—the proportion of non-ethelic alcohol that a given volume of alcohol may contain. Dr. Roulet would forbid the sale of all but alcohols made from the grape. During the course of the discussion that followed these proposals, it was estimated that in Switzerland 4 per cent. of the deaths, or 1 death per 1000 of the population per annum, could be attributed to alcoholism, and that excess was more general than in France. In the canton of Neufchâtel the proportion is 11 per 1000. The consumption of alcohol per head of the population was estimated at 23 litres in Denmark, 16 litres in Russia, 10 litres in Sweden and Germany, 9 litres in Belgium, about 7½ litres in Switzerland and the United States of America, 6 litres in England, 4 litres in Austria, and 3 litres in France. In the southern countries, such as Spain and Italy, the proportion was much less. M. E. Algave proposed as a remedy that the

State should control the manufacture and sale of alcohol, as it had done the sale &c. of tobacco in France; while Dr. de Therésiopolis, of Brazil, insisted that coffee was the natural antidote to alcohol, and its consumption as a nutritive stimulant should be widely encouraged. The bad, indeed the dangerous, character of the water-supply in many European towns also helped to stimulate inebriety. In Brazil, he maintained, the people had better water, drunk more coffee, and were more sober. The idea of a State monopoly met with considerable opposition. Dr. Landowsky insisted that drunkenness was the scourge of Russia, and this was due precisely to the fact that the trade in alcohol was a Government monopoly. In Russia the drunkard was venerated as much as the Arab venerates the madman. Peasants who had not money enough to drink copiously, pretended to be drunk for fear of being qualified as freethinkers, atheists, or nihilists, who are renowned in Russia for their comparative sobriety. Dr. Roulet, in reply, remarked that the State distillery at Berne was very unpopular, and declared he preferred an army of inspectors to an army of Government *employés*. Finally, Dr. Lubeski thought the occasion a good opportunity of challenging the French idiom, "Drunk as a Pole." In defence of his national honour he pointed to the statistics proving that drunkenness was more prevalent in several European countries and various districts of France than in Poland. Altogether the discussion seemed to show that the chemist, by facilitating analysis, would do more to prevent the evil effects of alcoholism than either private temperance societies or public legislation.

ANOTHER CHARGE AGAINST GUY'S HOSPITAL.

IN reference to the most recent charge brought against officials of Guy's Hospital, we felt it our duty to make some inquiries at the hospital, where we obtained from the house-surgeon the real facts of the case. It appears that on Friday morning, the 6th instant, half an hour after midnight, a cabman was brought to the hospital by his wife and a friend, who stated that he had fallen in getting out of his cab. The man smelt strongly of spirits, and appeared very drunk indeed, so much so that the house-surgeon gave him an emetic, and, that failing to produce effect, used the stomach-pump, with the result of removing from the stomach a very large quantity of strongly alcoholic fluid. After this operation the patient so far recovered as to be able to give his name and address and to walk out of the hospital to the cab, supported by his friends. He had been carefully examined by the house-surgeon, the house-physician and others being present, and no injury could be discovered beyond a bruise just above the left eye and a graze on the nose. From *The Times* report of the inquest which was subsequently necessary, it appears that the man was so helplessly drunk before the accident occurred, that he had to be driven in his own cab to his master's yard by a friend; on arriving, he tried to leave the cab, and in so doing fell. The diagnosis of the house-surgeon that the man was drunk was therefore abundantly confirmed; this being so, it seemed extraordinary that the coroner omitted to order a post-mortem examination to be made, so that the cause of death might be accurately determined, but was satisfied with the evidence of a medical man who had never seen the patient alive; still more strange that he did not call for the evidence of the hospital officer, especially as charges of gross inhumanity had been made against him and the nurse in the course of the inquiry; these, we are informed, can readily be refuted. It is something more than strange that the coroner, after such evidence, the truth of which remained unsubstantiated, should have felt justified in making "strong remarks," and thus should have led the jury to record a formal reprimand against the hospital officials. We are glad to hear that the matter is not likely to end here; it has of late unfortunately become the fashion to bring sensational and false charges against this hospital, and the authorities are determined that these shall no longer pass unchecked; they have therefore resolved that an effort shall be made to have the present charge fully investigated, and with this intention an application has already been forwarded to the Home Secretary calling his attention to the matter.

A CASE OF GASTROSTOMY.

ON Wednesday, the 4th inst., Mr. Francis Mason performed the first step of this operation at St. Thomas's Hospital on a man aged about sixty for rapidly increasing carcinoma of the left tonsil and neighbouring parts. An incision about two inches and a half in length was made parallel with the costal cartilages of the left side and about a finger's breadth from their margin, the lower end of which was about opposite the ninth rib. The structures of the abdominal wall were divided until the peritoneum was reached, which was carefully opened. The forefinger and thumb of the left hand were then introduced, and, guided by the left lobe of the liver, the stomach was readily grasped and brought out slightly at the wound. Great care was taken, both before and after the peritoneal cavity was opened, to arrest all hæmorrhage with catgut ligatures. The parietal layer of the peritoneum was accurately adjusted in contact with the visceral layer of the stomach, and the two surfaces were kept in contact by passing a carbolised silk thread through the whole thickness of the abdominal parietes, and also through the serous and muscular walls of the stomach; four such stitches were employed. Two other deep sutures were made to transfix each end of the wound only, care being taken to include the peritoneum. Lastly, a stitch was passed through the serous and muscular walls of the stomach itself, and was left hanging from the wound to be used as a guide for the future opening of the stomach. Superficial stitches were used to unite the edges of the skin wound. The operation was performed throughout under the carbolic spray, and dressed with the usual antiseptic precautions. The patient was very comfortable during the remainder of the day and passed a good night, but on the following day he complained of hiccough, which distressed him a good deal, giving rise to a painful dragging in the region of the wound. This was allayed by the administration of small doses of medicine containing dilute hydrocyanic acid; beyond this nothing but ice in small quantities, and afterwards, at the patient's special request, a small quantity of tea was allowed by the mouth, he being fed by nutrient enemata. On the second day there was some difficulty of breathing, and he spoke of a sensation of not being able to cough up phlegm and other accumulations from the air-passages. Still his temperature kept fairly normal. On the third day, however, the temperature rose to 101°, and in the afternoon his dyspnœa became so urgent that it was thought necessary to perform tracheotomy as a *dernier ressort*. This operation was performed by Mr. Duncan, the house-surgeon, with some relief, but, in two or three hours after, the patient died, apparently from exhaustion, exactly seventy-two hours after the gastrostomy was performed. At the post-mortem examination, it was found that adhesion of moderate firmness had taken place between the visceral and parietal layers of the peritoneum at the site of the operation, but not sufficiently firm to heal. The mucous surface of the stomach had not been perforated, and there was no general peritonitis. It may be added that the patient inhaled ether during the operation, which may possibly account partly for the dyspnœa, and also that he had some symptoms of carbolic poisoning, as indicated by the condition of the urine during life.

THE MEDICAL SOCIETY OF LONDON.

THIS Society will, under the presidency of Mr. Francis Mason, open its 110th winter session on Monday evening, the 16th inst., when, after the conclusion of the ordinary routine business and the delivery of a few introductory remarks by the President, Mr. Dolan of Halifax will read the *résumé* of his essay on Whooping-cough, which obtained the Fothergillian Prize of the Society in March last. Much important work is already arranged for the weekly meetings. On the 23rd inst. Mr. Bryant will read a paper on Inflammation and Ulceration of the Tongue, and early in November Mr. Sampson Gamgee will communicate a paper on Wounds and Fractures. The evening of Nov. 20th will be set apart for the discussion of points in thoracic surgery. Later on Mr. Edmund Owen will open a discussion on the Treatment of Cervical Caries, with the special view of ascertaining to what extent Sayre's "jury mast" is being employed at the present day. Dr. Heneage Gibbes has promised a demonstration of Bacteria. The builders are already at work upon the property which the Society has recently acquired next door to its home in Chandos-street, and when all is finished the Society will be well and permanently housed. The Medical Society of London, though an old one, is by no means infirm; indeed if the practical value of its communications and the vigour of its discussions count for anything, it appears to be growing younger with each returning session.

THE HUNTERIAN MUSEUM.

THE Museum of the Royal College of Surgeons has been in the hands of painters and cleaners since the beginning of August, and may remain in their possession for two months longer; the work is, however, sufficiently advanced to afford some idea of the final effect. The rooms are being painted not only with a pleasing regard to taste, but also with a view of displaying the treasures of the museum to advantage. The repairs are being conducted under the jealous eye of Professor Flower, the indefatigable curator of the museum.

BROMINE AS A DISINFECTANT.

IN a paper on the above subject, read at the Berlin Apothecaries' Congress, Dr. Franke of Charlottenburg called attention to the fact that the difference between disinfection and deodorisation has only recently been appreciated by the general public. It is, however, now known that many inodorous substances are highly dangerous communicators of disease. The researches of Dr. Koch have brought to light the fact that a number of so-called disinfectants which have been employed for many years are quite insufficient preservatives against many kinds of disease-germs. Thus of late the search after new and reliable disinfectants has been actively carried on. Bromine has materially decreased in price since its production on a large scale at Stassfurt has made it an article of commerce, and Dr. Franke claims to have succeeded in obviating the difficulties which its strong corrosive qualities and other circumstances placed in the way of its general adoption. By the employment of organic acid combinations of alkalies he has succeeded in obtaining in a fluid form eight-tenths of the volume of bromine. The evaporation of the bromine is, he states, thereby considerably retarded and a permanent disinfection facilitated. For mere deodorisation a comparatively small quantity of bromine suffices, while for real disinfection a greater bulk is required. Experiments made by the Berlin sanitary officials have resulted in the fact being established that three and a half ounces of bromine could disinfect a space of 918 cubic feet against the most inveterate forms of infection, for removing which sulphurous acid had proved unsuccessful. Other experiments showed that for simple deodorisation one-third of an ounce of bromine, hung up high, is sufficient for a space of 7000 cubic feet. With reference to the use of bromine in the practice of medicine, he remarked that in a gaseous form bromine could be introduced into parts of the body not accessible to any other corrosive agent. In connexion with the corrosive properties of bromine, he stated that petroleum had been accidentally discovered to be a cure for burns caused by bromine in a fluid state.

PROPOSED SANITARY MUSEUM IN SUNDERLAND.

A PRAISEWORTHY attempt is about to be made in Sunderland to extend the knowledge of sanitary matters amongst the residents in the North of England. The effort is initiated by Dr. Mordey Douglas, senior physician to the Sunderland Hospital for Sick Children, who proposes that the new municipal buildings be made to include accommodation for a permanent exhibition or Sanitary Museum, in connexion with which lectures on health subjects may be delivered from time to time, the discourses to be illustrated by the various exhibits. The proposal is a good one, and worthy of successful realisation.

PERTHSHIRE MEDICAL ASSOCIATION.

THE fourth annual meeting of this Society was held last week at the Infirmary, Perth. The Council's report showed the Society to be in a flourishing condition, that last year's meetings had been well attended, and the scientific work considerable. Special mention was made of the publication of the first volume of Transactions, and Dr. Urquhart, the editor, was cordially thanked. The Society had petitioned Parliament for further liberty to physiologists and others in experimenting upon animals; and the local members had been addressed on subjects of interest in medical politics. Mr. Fleming delivered the president's retiring address, dwelling chiefly upon the origin and progress of the Society. After some formal business was transacted, the following office-bearers were elected for the ensuing year: Mr. Thom, F.R.C.S.Ed., Crieff, President; Dr. Bramwell, Perth, Vice-President; Dr. Baird, Secretary; Dr. Graham, Treasurer; and Drs. H. W. Laing and Urquhart, and Messrs. Gillespie, Trotter, and Paterson, members of Council.

FULHAM HOSPITAL.

IN consequence of the prevalence of scarlet fever in the metropolis, this hospital was reopened on the 6th inst. for the reception of cases of that disease. Mr. R. D. R. Sweeting has been reappointed medical superintendent. Meanwhile it may be noted that the committee which moved successfully, a few months ago, for an injunction to stop the reception of small-pox cases at the hospital met on Thursday last, and passed the following resolutions:—1. "That the solicitor be instructed to write to the Asylums Board asking if they will confine the admission of the patients to the mile radius, as in the case of the existing injunction." 2. "That the solicitor, Mr. Tomlin, be instructed to take the necessary steps to obtain an injunction against the Asylums Board using the hospital for scarlet fever, typhus, or other contagious or infectious diseases."

NEW ENTRIES.

As the roll-books of the various metropolitan medical schools are open for fresh entries until the 14th of the present month, statements regarding the number of such entries must necessarily be imperfect prior to that date. We hope, however, by next week to be in a position to publish complete returns of the number of new students in the several schools of London and the provinces.

EPIDEMIOLOGICAL SOCIETY.

WE understand that at the conversazione of this Society, to be held at University College on the 18th instant, an interesting collection of microscopical preparations illustrative of the pathology of zymotic and parasitic diseases will be exhibited (on the invitation of the President, Dr. Buchanan) by Drs. Klein, Cobbold, Stephen Mackenzie, Professor Axe, Mr. Malcolm Morris, and others.

PATHOLOGY IN EDINBURGH.

OUR Edinburgh correspondent informs us that Dr. Bryan Waller, Lecturer on Pathology in the Extra-Academical School, is also a candidate for the office of Pathologist to the Edinburgh Royal Infirmary. His name was accidentally omitted from the list of candidates which we published last week.

TYPHOID FEVER is stated to have broken out among the men of the metropolitan police located in Portsmouth Dockyard. The police are quartered in a new pile of buildings, which has been erected in the Extension Works. The outbreak having been attributed to impure drinking-water, Major Grove, the superintending engineer, has written to exonerate the Water Company. He remarks that a report received from the Admiralty chemist upon several samples of the water supplied to the police quarters in question states that, after testing, he finds no difference between them, and that the water is of excellent quality as regards freedom from organic impurity.

ON Monday last H.S.H. Prince Edward of Saxe-Weimar, the General commanding the Southern District, accompanied by the Countess Domberg, visited the Royal Victoria Hospital at Netley. They appeared to take a deep interest in the wounded and invalids from Egypt now under treatment in that national establishment, and expressed themselves much pleased with the general arrangements and the care taken to promote the comfort and welfare of the inmates.

IN reference to a paragraph which appeared in the *City Press* of Oct. 7th, criticising the conduct of visitors at the soirée held at Guy's Hospital on the 2nd inst., the following, we are informed, are the facts:—During the evening someone strayed upstairs into the wards, and was followed by others. As soon as it was known by Dr. Steele, the superintendent, that this had occurred, it was immediately stopped, and the ward doors ordered to be locked.

OUR spirited contemporary, the *Sanitary Engineer* (New York) is publishing a series of articles descriptive of the elaborate sanitary arrangements in the residence of Mr. Cornelius Vanderbilt. The papers when completed will be interesting as showing what may be effected by scientific contrivances, designed to promote health and comfort, when the cost of them is not a consideration.

AT the last weekly meeting of the Metropolitan Board of Works in Spring-gardens, the tender of Messrs. Pearson and Son for £33,990 was accepted for the execution of an additional relief line of sewer on the south side of the Thames, with an outlet into the river at Deptford-green.

AN official despatch from Manilla, dated Oct. 7th, gives the average number of fatal cases of cholera as from 30 to 40 a day in the town and 12 in the suburbs. The epidemic, though declining in some of the provinces of the island, is increasing in others.

THE accounts of the spread of yellow fever in Texas are not reassuring. Though the epidemic is declining at Brownsville, Pensacola is suffering terribly from the scourge. The latest advices give 1300 as the present number of cases, whilst 113 deaths have occurred since the disease first broke out.

T. P. ANDERSON STUART, M.D., assistant to the Professor of Physiology in the University of Sydney, N.S.W., has been elected to the Chair of Anatomy and Physiology in that University.

DR. VANS CLARKE, medical officer of H.M. Convict Prison, Millbank, has been appointed Governor and Medical Superintendent of H.M. Convict Prison for Females at Woking.

THE Secretary of State for India has appointed Deputy Surgeon-General Francis Day, late Inspector-General of Fisheries in India, to the charge of the Indian department of the forthcoming Fisheries Exhibition.

WE understand that Mr. Redgrave, Her Majesty's Chief Inspector of Factories, is at the present time directing his attention to the arrangements connected with the white lead manufacture in Newcastle and its vicinity.

DR. CAMERON PIGGOT has been elected Lecturer on Chemistry and Pharmacy, and Dr. Amanda E. Taylor has been appointed adjunct to the Chair of Materia Medica and Therapeutics at the Women's Medical College of Baltimore.

BY the will of the late Mr. F. M. Balfour, £1000 is bequeathed to Dr. Michael Foster, to be applied by him to the promotion and encouragement of the study of physiology.

THE epidemic of typhoid fever at Bangor is reported to be showing signs of abatement, both as to extent and intensity.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Mid-Cheshire.—Mr. J. Makinson Fox has issued his annual report for the Mid-Cheshire combination, which consists of six urban and four rural sanitary districts. According to the last census return the population of the district was 135,749, it having increased from 120,659 in 1871. The birth-rate for the entire district amounts to 33·1 per 1000 inhabitants; and Mr. Fox finds it necessary, in two separate portions of his report, to warn the people against giving heed to the Malthusian theory that the multiplication and preservation of infantile life should not be regarded as an unmixed benefit. He maintains, on the contrary, that the tendency of such a theory is purely mischievous, and that it can only be destructive of all healthy enterprise, besides proving injurious to the morals of the community. He very properly congratulates several of his authorities on the circumstance that the infantile death-rate has decreased, and he regards this as a sure indication of that sanitary progress which goes hand in hand with the well-being of the inhabitants. The death-rate for the entire district has undergone a diminution, amounting only to 15·5 per 1000, and that from the seven principal zymotic diseases is as low as 0·92 per 1000. In the Northwich rural sanitary district the need for the provision of an infectious hospital is pointed out. Mr. Fox, however, presses for the erection of a wooden hut, and he considers that the publication by the Local Govern-

ment Board of a report which, amongst other matters, quoted an opinion as to the good results following the provision of such a hospital in a certain district, may be regarded as implying that the board approve such buildings, if they do not, indeed, hold them up for imitation. The experience quoted as to wooden hospitals and their use in the report on the Use and Influence of Hospitals for Infectious Diseases, which has just been issued, makes it, however, clear that the Local Government Board hold no such view, and it seems evident that wooden huts, as ordinarily constructed, are not adapted to the more severe of our winters. In the Lymm urban district an arrangement to use the Warrington infectious hospital has not turned out satisfactorily, and it is clear that the distance between the two places will prevent such use of the building as can alone be regarded as meeting the wants of the district. On the whole the sanitary circumstances of this combined area are favourable, and the record given of the works, such as the provision of a wholesome water-supply, which have been completed or are in progress, afford, together with the diminishing mortality, a crucial indication of the progressive sanitary improvement which is steadily being effected.

Birmingham.—Dr. Alfred Hill in his last quarterly report refers to a renewed prevalence of small-pox in the borough, some forty-three cases having been admitted into the borough hospital. He further explains to the Corporation that the first case treated in the borough this year came from the neighbouring sanitary district of King's Norton; and he considers that the importation of cases, even into hospital, from the surrounding districts is fraught with danger, and that the authorities of those districts ought to provide themselves with separate hospital accommodation. As regards these particular districts, and apart from the general question of combination in the provision of hospitals, we fully concur in Dr. Hill's view; and it is to be hoped that the decision now arrived at to refuse admission to such cases may have the desired effect of securing isolation-provision in the sanitary districts around the borough. But so long as this provision remains in abeyance, Birmingham will probably be subjected to even a greater risk from the uncontrolled centres of infection about its boundaries than it has been from the reception of infectious cases into its hospital, where further extension was prevented. It is certain that the Corporation ought not to be placed in this awkward dilemma by the failure of its neighbours to take the needed steps for the prevention of epidemic disease.

Islington.—According to Dr. Meymott Tidy's annual report for Islington, that parish had in 1881 a population of 282,865, as opposed to 10,212 in the year 1801. The number of inhabitants per house is 8·3; the births have been exceptionally low—namely, at the rate of 35·0 per 1000; marriages have been at the rate of 16·1, and deaths at the rate of 18·0 per 1000. Having regard to the steady increase in the population, this death-rate, the lowest experienced for some years past, must be regarded as very satisfactory. In common with the remainder of London, Islington experienced last year an epidemic of small-pox. The total number of cases which came under notice was 797, with a death-rate of 16·2 per cent. That rate varied, however, materially according to the amount of protection afforded by vaccination. Amongst the unvaccinated the rate was 50 per cent; amongst those alleged to have been vaccinated, however imperfectly, it was only 12·5 per cent. In dealing with the question of the isolation of the infectious sick, Dr. Tidy refers to the unfortunate distinction between paupers and non-paupers in connexion with the use of the hospitals belonging to the Metropolitan Asylums Board. It has often been pointed out that these hospitals, though professedly used for paupers only, do, as a matter of fact, receive non-paupers to the extent of 90 per cent. of their total admissions, and Dr. Tidy says that the percentage of non-paupers from Islington is even greater than that from the metropolis as a whole. Having regard to these facts it becomes obvious, as pointed out in the report, that the poor for whom hospital accommodation is so essential should be provided with it free of cost, and the question of pauperism should not be raised when the point at issue relates to the protection of the public from infection. We have already adverted to the inspection of metropolitan bakehouses since that duty was transferred from the vestries to the inspectors of factories, but we may here add that the details given by Dr. Tidy fully confirm his view that the average three visits a year by the local sanitary officers had led to better results than the much more occasional visit of the Government inspector have as yet brought about. In this matter, it is urged, local registration was wanted, and not that centralisation which tends so effectually to remove local responsibility and hence to lower the general efficiency of local self-government. Separate reports are appended which show how effectually the tent hospitals tided over the emergency which the small-pox epidemic of last spring and summer had brought about.

Rochdale.—In a special report, Mr. Henry, the medical officer of health, gives certain statistical information concerning the late small-pox epidemic on which we recently commented. Out of a total of 906 cases the death-rate was 11·59 per cent. Amongst 742 vaccinated cases it was 4·31, amongst 54 doubtful cases 24·1, and amongst 107 unvaccinated cases it was 56·1 per cent.; whereas not a single fatal case occurred in a revaccinated person. The number of revaccinated patients was 3; the operation had in each case been performed at the age of puberty, and the slight attacks of small-pox, from which they suffered, occurred at the ages of twenty-five, thirty, and forty-six respectively. Mr. Henry estimates that 5 per cent. of the population of the borough are unvaccinated, and, according to his estimate, it would appear that small-pox attacked 11·3 per 1000 of those who had been vaccinated, however imperfectly; whereas it attacked 31·1 of the unvaccinated.

Paddington.—The report of Dr. Stevenson for the year 1881 is one of considerable interest. He is able to give a very creditable account of the sanitary condition of the parish; the annual death-rate being 15·7, as against 21·2 per 1000 for all London and 19·5 for the West districts. In the matter of small-pox, which was the special discredit of the metropolis, he has to record only seven deaths in Paddington. There was in the fourth quarter an unexplained prevalence of typhoid. The report abounds in very instructive tables of all kinds regarding the purity of the different water-supplies, population of areas, deaths from the principal zymotic diseases and from all diseases, &c.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, 5513 births and 3228 deaths were registered during the week ending the 7th inst. The annual death-rate in these towns, which had been equal to 20·8 and 20·6 per 1000 in the two preceding weeks, further declined last week to 19·9. During last quarter the death-rate in these towns averaged 20·6 per 1000, against 23·2 and 20·5 in the corresponding periods of 1880 and 1881. The lowest death-rates in these towns last week were 12·6 in Halifax, 14·2 in Bristol, 14·4 in Huddersfield, and 14·7 in Norwich. The rates in the other towns ranged upwards to 26·8 in Manchester, 27·0 in Blackburn, 27·7 in Birkenhead, and 32·0 in Sunderland. The deaths referred to the principal zymotic diseases in the twenty-eight towns were 488, showing a further decline from the numbers in recent weeks; 132 resulted from diarrhœa, 119 from scarlet fever, 78 from "fever" (principally enteric), 70 from whooping-cough, 52 from measles, 30 from diphtheria, and 7 from small-pox. No death from any of these diseases was recorded in Huddersfield, whereas they caused the highest death-rates in Preston, Blackburn, and Sunderland. Diarrhœa was proportionately most fatal in Blackburn and Preston; scarlet fever in Sunderland and Sheffield; measles in Sunderland and Birkenhead; whooping-cough in Blackburn; and "fever" in Sunderland and Portsmouth. Of the 30 deaths from diphtheria in the twenty-eight towns, 22 occurred in London and 3 in Leeds. Small-pox caused 4 deaths in London and its outer ring of suburban districts and one each in Birmingham, Liverpool, Hull, and Newcastle-on-Tyne. The number of small-pox patients in the metropolitan asylum hospitals, which had been 79 and 80 on the two preceding Saturdays, was again 79 at the end of last week; 14 new cases of small-pox were admitted to these hospitals during last week, against 10, 13, and 17 in the three previous weeks. The deaths referred to diseases of the respiratory organs in London, which had in the four preceding weeks increased from 178 to 300, declined again last week to 253, and were 8 below the corrected weekly average. The causes of 81, or 2·5 per cent., of the deaths in the twenty-eight towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Brighton, and in four other smaller towns;

while the proportions of uncertified deaths were largest in Oldham, Preston, Hull, and Sunderland.

HEALTH OF SCOTCH TOWNS.

The annual death-rate in the eight Scotch towns, which had been equal to 18·1 and 21·0 per 1000 in the two preceding weeks, further rose to 22·3 in the week ending the 7th inst., and exceeded by 2·4 the mean rate during the week in the twenty-eight large English towns. The deaths referred to the principal zymotic diseases in these Scotch towns, which had been 83 and 117 in the two previous weeks, declined again to 107 last week; they included 36 from diarrhœa, 23 from whooping-cough, 17 from scarlet fever, 17 from diphtheria, 9 from "fever," 5 from measles, and not one from small-pox. The death-rate from these principal zymotic diseases averaged 4·6 per 1000 in the eight towns, and exceeded by 1·6, or more than a half, the rate from the same diseases in the large English towns. The highest zymotic death-rates in the Scotch towns last week occurred in Perth and Greenock. The 36 deaths attributed to diarrhœa showed a further increase of 2 upon those in the two previous weeks, and exceeded by 50 per cent. the fatal cases in the corresponding week of last year. The fatal cases of whooping-cough, which had been 13 and 17 in the two previous weeks, further rose to 23, of which 16 occurred in Glasgow, and 3 in Greenock. The 17 deaths from scarlet fever showed a decline of 5 from those in the previous week, and included 8 in Glasgow, 4 in Edinburgh, and 2 both in Dundee and Paisley. The 17 fatal cases of diphtheria also showed a decline; 7 were returned in Glasgow, 4 in Greenock, and 3 (Dr. Littlejohn reported but 2) in Edinburgh. Six of the 9 deaths referred to "fever" occurred in Glasgow, and 2 in Perth. Two more fatal cases of measles were returned in Dundee. The deaths referred to acute diseases of the lungs in the eight towns, which had steadily increased from 61 to 102 in the four preceding weeks, were again 102 last week, which exceeded by 6 the number attributed to the same diseases in the corresponding week of last year.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 26·1 and 23·7 per 1000 in the two preceding weeks, further declined to 19·9 in the week ending the 7th inst. During the thirteen weeks of last quarter the death-rate in the city averaged, however, 23·1 per 1000, against 18·6 in London and 17·8 in Edinburgh. The 133 deaths in Dublin last week showed a further decline of 25 from recent weekly numbers; they included 7 which were referred to diarrhœa, 4 to whooping-cough, 2 to "fever," one to measles, and not one either to small-pox, scarlet fever, or diphtheria. Thus 14 deaths resulted from these principal zymotic diseases, against 28, 20, and 15 in the three preceding weeks; they were equal to an annual rate of 2·1 per 1000, while the rate from the same diseases was equal to 2·8 in London and 3·4 in Edinburgh. The fatal cases of diarrhœa, which had steadily declined from 19 to 8 in the five previous weeks, further fell to 7 last week; they were equal to a rate exceeding that which prevailed in London, although considerably lower than the rate from the same cause in Edinburgh. The 4 fatal cases of whooping-cough and the 2 of "fever" showed an increase upon the numbers in the previous week. The deaths both of infants and of elderly persons were considerably fewer than in any recent week. The causes of 11, or rather more than 8 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

ARMY MEDICAL DEPARTMENT.—Surgeon-Major Edward Litton Low, M.B., is granted retired pay, with the honorary rank of Brigade Surgeon.

BENGAL MEDICAL SERVICE.—To be Surgeons: Richard Havelock Charles, M.D., George Duncan, William Ainley Sykes.

MADRAS MEDICAL SERVICE.—To be Surgeons: Edwin William Reilly and James Scott.

BOMBAY MEDICAL SERVICE.—To be Surgeons: Robert William Steele Lyons, M.D., John Patrick Barry, Alexander Vass Anderson.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Fleet Surgeon John Mulvany has been placed on the Retired List of his rank from October 6th; Staff Surgeon Ernest Arthur Hudson has been placed on the Retired List of his rank from Oct. 3rd.

Staff Surgeon William Labdon Powell has been promoted to the rank of Fleet Surgeon in Her Majesty's Fleet, with seniority of September 24th, 1882.

The following appointments have been made:—Fleet Surgeon Belgrave Ninnis, to the *Duke of Wellington*, additional, for transport service; Surgeon William G. K. Barnes, to the *Impregnable*, vice Surgeon M'Carthy; Staff Surgeon Alfred G. Delmege, to the *Constance*.

PROFESSOR LISTER ON THE APPLICATION OF A KNOWLEDGE OF HYDROSTATICS AND HYDRAULICS TO PRACTICAL MEDICINE.

PROFESSOR LISTER, F.R.S., delivered an address to the Medical Society of University College on Wednesday, the 11th inst., in the Botany Theatre of the College. There was a large attendance of students, who evidently highly appreciated the address, and gave a very warm welcome to Mr. Lister on this visit to his *alma mater*. Referring to Mr. Beck's remark, in his excellent introductory lecture, that physiology is the application of chemistry and physics to the study of life, Mr. Lister said that it would naturally be expected that physics would be one of the subjects in which medical students would be compelled to show a certain amount of proficiency. By the latest regulations of the Medical Council students could be registered without giving evidence of any knowledge of physics, and as this subject was not required by the Royal College of Surgeons, these students could, and no doubt would, become registered practitioners without such training. In view of this he proposed to show some of the practical uses in medicine of a knowledge of the simple facts of hydraulics and hydrostatics.

Mr. Lister then first referred to the fact that fluid always maintains the same level in communicating tubes of different calibre, and from that passed on to describe the "hydrostatic paradox" and the Bramah press. As a practical application of this principle he adduced the treatment of a wound of one of the palmar arches. In such a case it was necessary to enlarge the wound sufficiently to see the exact bleeding point, and to place the apex of a graduated compress exactly on this point; for if the compress were inaccurately applied, the blood finding its way out of the wounded artery would convert the wound into a kind of Bramah press, and either force up the compress or distend the interstices of the softer tissues. From this Mr. Lister passed on to consider some of the simpler facts about fluids in motion. For this purpose he had a vessel of coloured water raised above the table, from which depended a rubber tube connected at its end with a fine glass nozzle. Allowing the fluid to flow through this apparatus, he noted the height of the jet of water, and then replaced the middle of the tube by an equal length of tube of double the diameter and four times the capacity, and pointed out that, the force remaining the same, the height of the fountain of fluid was practically the same. He used this experiment to show that large varicose veins do not increase the labour of the heart or impede the return of blood to the heart, and that those writers who made such statements were evidently ignorant of simple physical laws. He next held the tube at various elevations, and showed that the position of the tube did not influence the height of the fountain or the flow of blood through the tube, and therefore the effect on the blood circulation of raising or depressing a limb could not be explained on simple hydraulic principles, except in so far as the increased or diminished blood-pressure might cause distension or shrinking of the bloodvessels. And how were the facts to be explained, that raising the head of a debilitated patient may cause syncope and anæmia of the brain, and depressing the head of a fainting person will infallibly cure the faintness and restore the circulation in the brain? What was

wanted was relaxation of the arteries; the mere action of gravity would tend rather to the dilatation of the veins, and as the brain is contained in a closed rigid cavity, it was impossible to explain the facts on mere hydraulic principles. Mr. Lister stated that many years ago he had a horse slung and laid bare one of the metatarsal arteries; if, now, he were held with the foot dependent the wound bled freely, and the artery was dilated and pulsated freely, while when the horse was inverted and the hoof raised in the air the wound ceased to bleed, and the artery contracted and ceased to pulsate visibly; in the horizontal position the condition was intermediate. Stephen Hales, who was a vivisector, though a divine, had shown that the blood-pressure in the carotid of a horse raised a column of blood seven feet high, and it was clear, therefore, that the effect in Mr. Lister's experiment was not due simply to the action of gravity. Further, when a large artery, such as the femoral, is exposed for the purpose of applying a ligature around it, the vessel is seen to be of a constant size; the pulse does not affect its calibre even when that is measured accurately by calipers; the vessel becomes slightly elongated, but the circular muscular fibres do not permit of lateral yielding of the vessel to any degree, and yet the blood is altered enormously during the cardiac systole. In reference to this, Mr. Lister warned his hearers against being misled by certain pulse-tracings in physiological works, in which the effects of respiration on the pulse were shown by large curves, and that of the cardiac systole by only short notches in the line, as if the effect of respiration on the arterial pressure was much greater than that of the heart. The explanation was that the effect of the heart's contraction took some time to show itself, and before it was fully recorded by the apparatus it was interrupted by the diastole. He had himself, many years ago, performed the following experiment:—Tying into the external carotid artery of a dog a glass tube with an aperture less than one-hundredth of an inch in diameter (so that the loss of blood should be insignificant), he directed the fine fountain of blood on to a sheet of white paper, which was regularly moved along; in this way a tracing was made by the blood itself, which showed that the arterial pressure during systole was double that during diastole.

From these facts it is evident that we must look to the vaso-motor system to explain the cause and cure of a fainting fit by position of the head, and the effects of position upon the blood-flow. When a limb is raised, blood flows down by gravity and the veins are relaxed, and we can imagine that an afferent stimulus is thus excited which reflected along the vaso-motor nerves contracts the arteries. If, however, the tissues are kept for a long time ill supplied with blood, there is such a demand set up for this fluid that the vessels dilate even in spite of the elevated position of the limb, which originally caused anæmia. This was illustrated by the well-known experiment of keeping one arm raised above the head and the other pendent, the former becoming pale and the latter turgid. An elastic band was then rapidly wound round the upper part of the elevated arm, and when, after a few minutes, this was removed, the whole limb became suffused and redder than its dependent fellow. Illustrations of the working of this principle were to be seen in the sequence to the ligature of a large artery, the limb at first becoming cold and pale from mechanical cutting off of the blood supply, and then hot and suffused from dilitation of the vessels as a result of tissue-starvation. For the same reason, in piles and affections of the pelvic viscera raising the lower limbs gave great relief, for the contraction of the arteries was not limited to the limbs, but spread to the vessels of the pelvis. As a further instance, he mentioned the case of a man who suffered extreme pain in his testicles when in an upright position, but was immediately relieved by sitting down and putting up his feet. Raising the arms above the head, too, was a well-known means of stopping epistaxis, and succeeded, because the contraction of the arteries of the arms spread by sympathy to those of the Schneiderian mucous membrane. Mr. Lister concluded by stating that he hoped that the few illustrations he had been able to give would show the value of a knowledge of hydrostatics and hydraulics, especially as indicating where physiological effects were produced by other than physical causes.

THE new isolation hospital for small-pox patients, erected at Barr-lane, Newcastle-on-Tyne, is stated by Dr. Armstrong to be full.

THE MINUTES OF EVIDENCE BEFORE THE ROYAL COMMISSION ON MEDICAL ACTS.

THE INEQUALITY OF THE MEDICAL AND SURGICAL EXAMINATIONS.

THE following evidence of Dr. HALDANE on the rejections of ill-prepared students by the Royal College of Physicians, Edinburgh, in addition to that published in THE LANCET of September 23rd, deserves publication and attention.

2684. (*Professor Turner.*) I think you have had large experience for many years as an examiner in the Royal College of Physicians, Edinburgh?—I have.

2685. A statement has been made to the Commission that a considerable number of students who have obtained their education in England come to the Edinburgh College of Physicians for the purpose of obtaining a licence in medicine; is that so?—That is the case.

2686. The statement has also been made that the students who come from England to the College of Physicians of Edinburgh are ill-prepared students, or students who have failed in London; have you any knowledge on that matter?—That many of them are ill-prepared I can answer for from the number of rejections that take place.

2687. Have you got any facts to lay before us as to the rejections which take place?—I have. I analysed the candidates who came up for the single qualification during the course of last year, 1880.

2688. (*Chairman.*) Is that for the first examination?—No, the final examination. I find that 191 candidates came forward, and they were classified as follows:—100 members of the Royal College of Surgeons of England appeared for examination, and every one of those had passed an examination in medicine before he came to us; but of this number 22 were rejected—22 per cent. of those men were rejected.

2689. (*Mr. Simon.*) In medicine, do you mean?—This was our final examination. I can give afterwards the subjects on which every man was rejected, but in the first place I am speaking of merely the general result of the final examination—22 per cent. of the members of the Royal College of Surgeons of England were rejected. Then we also take up men who have passed everything before the College of Surgeons of England with the exception of medicine; the registrar, Mr. Trimmer, sends a certificate stating they have passed upon everything but medicine. Of those candidates we had 24; seven of those 24 were rejected, or 29 per cent. That is a somewhat higher percentage of rejections than in the case of the members. Then 25 licentiates of the Royal College of Surgeons in Ireland came up; of these nine were rejected, or 36 per cent.; six licentiates of the Royal College of Surgeons of Edinburgh, and all of these passed; 15 of the licentiates of the Faculty of Physicians and Surgeons of Glasgow came up, and seven were rejected, or 46·6 per cent.; eight licentiates of the Apothecaries' Society of London came up, and they all passed; four men who were holders of Canadian degrees came up, and of those only one passed; nine students came up, and of those five were rejected.

2690. (*Professor Turner.*) When you say that the members of the Royal College of Surgeons of England who appeared before you had passed an examination in medicine, am I to understand that they had a licence in medicine?—No.

2691. But that they had passed an examination in medicine before the Royal College of Surgeons in England?—Exactly; the Royal College of Surgeons in England will not give its diploma to anyone who has not passed an examination in medicine. But as I have said before, they will put a man down as having passed in all his subjects and give him his diploma when he has passed in medicine somewhere else; and these are the men who come to us with the certificates of Mr. Trimmer. There were twenty-four of them, and they had not been examined in medicine at all.

2692. I think you referred to a hundred?—191 altogether; that is the total number. There were 100 members of the College of Surgeons of England who came up.

2693. The point I want to get at is this: Can you give us any information as to where these gentlemen had passed their examination in medicine. I mean these gentlemen that you found unqualified in medicine?—Before the College of Surgeons of England. They have, I think, two special ex-

aminers in medicine. I think two is the number; I am not quite sure.

2694. Have you formed any conclusion in your own mind as to the quality of the examination of your own body, looking at it in comparison with the examinations in medicine which these various candidates that you have referred to had passed at other examining boards? Have you formed any comparative idea of the value of your own examination?—Certainly. The conclusion to be drawn is that our examination in medicine must be very considerably higher than the examination by the College of Surgeons of England. Of course a man is not so thoroughly examined, I presume, before the College of Surgeons of England in medicine, where it is only one subject out of many, as with us, where it is our principal subject; 22 per cent. of those men were rejected.

2695. Then of these gentlemen, members of the College of Surgeons of England, who appeared before you for examination for a licence in medicine, can you state to us the subjects in which they were deficient when they appeared for your examination?—I can. I have taken a note of every one of the 53 rejections; I have no names, of course, but I have the qualifications in one column.

2696. Your table is evidently a table of considerable length, an elaborate analysis of the results of examination of your college. I will not ask you to give in your evidence the whole of the table, but perhaps you could select from it two or three prominent examples, so as to give the Commission an idea of the nature of the table?—Fifty-three candidates were rejected at our final examination, which includes an examination in medicine, materia medica, midwifery, and medical jurisprudence; 19 of the 53 were rejected in every one of the subjects; 13 were rejected in three of the subjects.

2697. Would you name the three subjects?—It is in the table, everything is there. Sixteen were rejected on two subjects, and 5 were rejected upon only one subject; 46 out of the 53 were rejected in medicine.

2698. Displaying ignorance in medicine?—Yes, to such an extent that we could not give them our diploma; 36 failed in materia medica, 39 failed in midwifery, and 31 failed in medical jurisprudence.

MEDICINE IN JAPAN.

WE are glad to welcome, as a sign of the material progress of scientific medicine in the far East, our Japanese contemporary, the *I-ji-Shimbun*, or "Medical News," a weekly periodical, which has already, under the editorship of Mr. Midzu-moto, of Tokio, reached its second year of issue. The number now before us, dated April the 5th, 1882, may be taken as a good example of the work that the staff and publishers have courageously undertaken in the face of the untimely end that has befallen the previous literary bantlings of Japanese medicine. In form it is a useful compromise between the native and European styles; but although English paper has been substituted for the less convenient Japanese material (which allows the impression to be taken upon only one side of the sheet), and the solid wood blocks of the oriental printer have perforce given place to movable metallic type, the publication presents a rather strange aspect to European eyes, beginning, as it does, at the page that for us would be the last, and printed in complicated characters that run vertically down the page, and are separated into double columns by horizontal lines. The matter, however, in nature and arrangement, bears evidence of a close study of Western models.

The articles, which appear to be carefully written, and well adapted to the requirements of the subscribers, are grouped in sections devoted severally to original contributions, general medical news, official reports, hospital reports, meetings of societies, extracts from foreign periodicals, pharmacological notes, and notices of books.

In the first section is a carefully written account of a dissection of a double monster, accompanied by two good woodcut illustrations, one of which gives a well-drawn scheme of the circulatory apparatus in the fused thoracico-abdominal cavity. In the second section are several items that have an interest as indications of the national progress of the new system, such as the statistical report of the inmates of the Kioto Lunatic Asylum (an entirely novel institution in Japan); a notification of the official permission accorded to a provincial medical college, conducted upon the European plan, to give medical qualifications to its pupils; and the announcement of the despatch of Mr. Mayeda, a well-known surgeon attached to the Naval Medical School, to Korea, where it is proposed to initiate the study of Western medicine. These items, small as they may appear, speak volumes for the medical future of a country that only a few years ago was wholly given over to the barbarities of the pretentious empiricism of the Middle Kingdom.

The next section gives a statement in detail of the prevalence of typhoid fever in the past year. From this we learn that 23,852 cases were notified, and of these 5679 were fatal.

This is fitly succeeded by an account of the first meeting of a Sanitary Association, the members of which will indeed find no lack of material for their reforming energies to work upon, and may expect gigantic results in a country where cholera has within the last four years slain its two hundred thousand, and is now engaged in its third biennial campaign; and where typhoid fever, beriberi, and a dozen other filth engendered diseases have for centuries robbed the nation of its strength.

Passing on a stage further, we find hospital practice well represented by a report of a successful operation for strangulated inguinal hernia, by Mr. Sasaki, at Matsuye Hospital of Shimane Ken.

Lastly, the section of extracts includes a few translations from American and English medical journals, amongst which may be noted "The Use of Borax as a Deodoriser" (Dr. Thin), and "The treatment of Nebulæ of the Cornea by the Sulphate of Cadmium." This division of the paper, however, might be extended with advantage.

The originators of this modest publication may be congratulated upon the evidence of strong vitality which it displays. Medical journalism in Japan has had but poor prospects of success hitherto, for although there is no deficiency of practitioners of the art (the number of registrable "doctors" attaining the respectable figure of 65,000), the most charitable calculation has not extracted from the total more than about 800 enlightened spirits who have ventured to sacrifice the classical Chinese laws in favour of that which they designate the "Western system"; and it is to be feared that even this modest ratio of orthodoxy to empiricism would be terribly reduced were the claims of our nominal adherents subjected to serious test. The cause of medical literature must hence necessarily suffer from a poor subscription list; but beyond this it has in the past lacked a sufficiency of willing and competent native contributors, who alone could make the experiment with any hope of success. Happily, the *I-ji-Shimbun* proves that a new era is dawning, and leads us to hope that we shall soon see the results of the work done by the Government in the foundation of the Tokio Medical College, the Naval Medical School, and other institutions conducted by foreign instructors, and in the expenses they have incurred in educating chosen men in the Colleges of Germany and England. The country now has in Drs. Satow, Hashimoto, and Ikeda, who have graduated in Berlin, Mr. Takaki, a Fellow of the English College of Surgeons, Drs. Miyake, Toksuka, Matsumoto, and some others, a strong intellectual force, and it is upon these that the future place of Japan in the medical world will depend. The present journal has laid a good foundation, and is not attempting to run up the edifice too quickly. There is little in the numbers now before us that calls for quotation in our columns; but this is in no degree adverse to its claims as a valuable organ of instruction and intelligence. There are men in Japan who are fully capable of good original work; but, for the present, it is essential that the educational functions of the medical press should be confined within narrow limits, as the practitioners for whose benefit a native journal is especially desirable understand little of any language but their own, and almost nothing of the science of modern investigation. These will look for easily comprehended reports of cases of common occurrence, and well-chosen and carefully simplified illustrations of important facts of diagnostic and therapeutic interest, rather than for pathological theories and details of rare operations. On the other hand, the more accomplished members of the profession can read and digest the European journals in the original, and when this little band has become increased by the reinforcements now in busy preparation it will be time to take a new departure in literature. In the meantime ambition is best served by humility, and we hope to measure in the future years of the life of the *I-ji-Shimbun* the development of those newly awakened faculties of observa-

tion which are already so well manifested in the modest and useful articles which have set a stamp of value upon its earliest volumes.

Correspondence.

"Audi alteram partem."

WOOLSORTERS' DISEASE.

To the Editor of THE LANCET.

SIR,—For nearly twelve months have we been clear in this neighbourhood of any cases of the above justly-dreaded disease. It appears, however, we have not arrived at the stage of complete immunity, notwithstanding all the precautions which have been adopted—the steeping of unopened bales, washing the wool in a sud of water at from 100° to 120°, passing through rollers, sorting the wool when damp, &c. The whole of these processes had been gone through prior to the wool reaching the workman who has now succumbed to this malady. Whether the washing process had been imperfectly carried out, or what is just as likely, that the workman became infected from having access to other departments where the washing of the wool was conducted, it is difficult to say.

John G——, aged sixty-one, a "filler" (in the combing department) of boxes with brown Van mohair which had been washed and sorted, had been at work for seven years, and had enjoyed previous good health; said to have been always temperate, and looked so. On Thursday the 7th ult. he observed a papule on the outer border of the right radius, two inches above the wrist; he paid no attention to it as he was free from pain. The top of the papule was knocked off on the 9th while cleaning some boxes. On the 10th the papule began to enlarge and became slightly inflamed. Continued to work till late in the evening of the 12th. Got up on the morning of the 13th to go to work, but said he would not go, although he did not apprehend anything serious. In the evening of this day I was called in, and found him lying on his back, looking anxious, pale, and sweating moderately; answered intelligently any questions, no delirium, complained of a little pain in the epigastric region. Above the right wrist I found an eruption about the size of a shilling, having a black sloughing centre with a vesicular rim, about one-eighth of an inch broad, loaded with a sero-sanguinolent fluid, which was trickling down on to the bed. The hand and half way up the arm was œdematous. Tongue moist, coated with white fur. Respiration 33 and shallow; physical examination did not reveal anything abnormal. Pulse 84, regular. Heart sounds very indistinct, could scarcely be heard at all. Bowels loose, from taking some sulphate of magnesia. Urine had just been voided when the bowels were moved, and could not be observed. Temperature in axilla was subnormal. Treatment: Stimulants, beef-tea, and milk ordered; sulphite of soda in drachm-doses every three hours, and a lotion of the same kept constantly applied to the pustule. The patient died seven hours after I saw him.

Autopsy, twelve hours after death.—Rigor mortis marked; livid discoloration on back, flanks, and back of left upper arm, whole of left side of neck; left external jugular vein distended; lividity of ears, fingers, and finger nails. Lungs emphysematous, not shrinking back after chest was opened; hypostatic congestion over posterior aspect of both lungs; very small quantity of prune-juice looking fluid, in right pleural cavity, none in left, no pleuritic adhesions; lungs crepitant all over. Heart: Cavity of pericardium contained half an ounce of bloody fluid; right ventricle collapsed and empty, both auricles empty; left ventricular wall thickened, cavities small; all the valves were normal; inner coat of aorta slightly stained, healthy otherwise. Abdominal cavity contained a large quantity of amber-coloured serum; between the layers of the large omentum there was a thick gelatinous deposit, extending over the right half of the omentum, including and covering the transverse colon, and half way down the ascending colon; patches of livid congestion existed in small intestines. Spleen twice as thick as natural, convex surface of capsule was dense, white, and opaque. Kidneys healthy; the capsules stripped off easily. Liver: surface rough, nodulated, tough, and hard, resisting breaking up by the fingers; right lobe diminished, left lobe not so much altered in size. Bowels healthy, no hæmorrhages; the valvulæ conniventes were swollen from contained gelatinous material. The glands at the root of the lungs were not enlarged or softened. In removing the pustule on the arm, a quantity of serum which had become gelatinised, was observed beneath.

Microscopic examination of the fluids of the body, notably from the spleen, revealed the bacillus believed to be, by many, the *materies morbi*. Subcutaneous injection with these fluids, containing these bacilli, was fatal to animals, the fluids from these animals again showing the same micro-organism. I am, Sir, your obedient servant,

Bradford, Oct. 1882. L. S. MACKENZIE, L.R.C.P., &c.

MONOPOLY OF HOSPITAL APPOINTMENTS BY THE FELLOWS OF CORPORATIONS.

To the Editor of THE LANCET.

SIR,—The following passage on page 447 of your issue of September 16th induces me to address you as to what I feel to be a grievance: "Since the late Mr. Wakley founded THE LANCET to protect the rights of the public and to assert the rights of the profession against encroaching corporations." Also on page 449: "The Act of 1858 broke down the territorial privileges of the licensing bodies, and made a licence valid anywhere in the United Kingdom." The latter is only half the truth. It is quite true that the possessor of any registrable degree or diploma may now practise anywhere in the country without let or hindrance; but it is equally true that he cannot, unless he be a Fellow or Member of the Royal College of Physicians, hold any appointment in London which is worth having, and very few, indeed, in the provinces. The same obtains if not in Scotland at least in Edinburgh, where very recently a candidate was disqualified from competing because he was not a Fellow of the Edinburgh College of Physicians. I consider that this system is a grievous abuse; for it cannot be pretended that those who hold the degrees of Edinburgh, London, Dublin, Glasgow, Oxford, and Cambridge are, in point of scientific acquirements, inferior to members of the Colleges of Physicians; and that the exclusion of graduates of the universities from hospital appointments is a breach or evasion of the letter and spirit of the Medical Act before mentioned. It may be urged that private bodies have a right to nominate their own officials. I concede this, but must point out that, with the exception of Guy's, St. Bartholomew's, and St. Thomas's, all the other hospitals in London participate in public charity, and receive a share of Hospital Sunday collections, and that the same obtains in the provinces where, I imagine, there are no endowed institutions. But the fact remains that not only does this monopoly exist, but it goes on steadily increasing, and to this grievous abuse I hope you will turn your attention. There can be no possible objection to imposing certain conditions on hospital physicians—i.e., that they shall not be in partnership with anyone, and that they shall not practise midwifery. But beyond this, and a prohibition against dispensing, I do not see at present any reason for going. I apprehend that the statistics of cottage hospitals, which as a rule are not under the control of Fellows and Members of the Colleges, will show that, making allowance for country air, the patients in them do just as well as in those institutions where only Fellows and Members of the Royal College of Physicians are allowed to practise. In writing to you I do so in confidence, as I am fully aware of the boycotting propensities and practices of the Royal College of Physicians. I have been repeatedly urged to join them by Members and Fellows, and had it more than hinted that they were very clannish as a body and would have nothing to say to outsiders; and this I believe, from my personal observation, to be the case. Setting up for purists in practice and ethics, I know of one Fellow who has his name on a huge placard (of the style of "no trespassers allowed") at a considerable distance from his house, and another who does not disdain to put up a fracture when there are surgeons in plenty at hand.

I am, Sir, yours, &c.,

Oct. 1882. M.D. Edin. and Paris.

THE TEMPERATURE AND PULSE IN REMITTENT FEVER.

To the Editor of THE LANCET.

SIR,—During my three years' tenure of office as surgeon of the Royal Naval Hospital, Malta, ending in June last, numerous cases of Mediterranean remittent fever were received for treatment from the crews of H.M. ships on the station, and during the early months of this year the ships in the harbour sent to hospital an unusually large number of very severe cases with a marked tendency to develop complications.

The following fact presented itself to my mind very forcibly; and as it seems of considerable importance in the early diagnosis of complications in these fevers, I deem it worthy of record, not having noticed it in any of the works on the subject I have read—viz., that although the temperature often rose to 104° or 105° the pulse remained almost normal in uncomplicated cases. If, however, a complication set in, such as pneumonia, hepatic, or cerebral congestion, the pulse at once rose far above the normal. Of course when the temperature was 104° or 105° the patient was as it were on the brink of a precipice, and complications were then very liable to occur; but while the pulse did not exceed 80, even though the temperature was 104°, no complication was found to exist, and a favourable prognosis could be made.

I am, Sir, yours truly,

J. WILSON, M.D., Surgeon R.N.

H.M.S. *Hecla*, Oct. 4th, 1882.

THE WAR IN EGYPT.

(*From our Special Correspondent.*)

THE brilliant campaign in Egypt, conducted by Sir Garnet Wolseley, having terminated dramatically with the general action of Tel-el-Kebir, the flight and surrender of Arabi, the forced cavalry march to Cairo, and the capitulation of all the places in the country that held out against us, has been followed by a pause sorely needed by the troops and all concerned. Events have hitherto succeeded one another with the rapidity of telegraphy. This war, as far as the military operations are concerned, began and culminated with a rush.

Probably no campaign undertaken by England has been characterised by a greater amount of preparation: field and base hospital material and *personnel*, medical and surgical appliances, and what are known as medical comforts, were shipped in abundance, accompanied by a body of well-trained nurses, most expensively fitted-up hospital ships, ice-making machines, and what not. That all these aids and appliances to our latest field service system were not utilised to the extent they might have been has been mainly attributable to two facts—viz., the necessarily precipitate and impetuous nature of the military operations and the want of adequate transport.

The field medical service of modern warfare is based upon a few simple principles capable of being understood by anyone. In civil life, in our civil hospitals for example, there is ample room for the exercise of individual skill and the leisurely application of surgical science. But in war it is far otherwise; there is room, indeed, for the exercise of these qualities, but organisation and system dominate everything else. If the administration be not based upon sound and simple principles no amount of individual skill, nor of supplies and appliances, will be of the least avail. The principles are then to evacuate the sick and wounded men from front to base, always—that is, in the direction they must take—in a continuous stream; and to provide for the requirements of the fighting force in front such an amount of hospital accommodation and medical aid as shall be adequate, while it is at the same time as mobile as practicable. The machinery by which all this is accomplished is a system of field or movable, and base or general hospitals, including in the latter any posting hospital accommodation that may be available and utilised. The very pivot of this system, without which its distinctive character of field and base hospitals is lost and its effectiveness for work has no existence, is that, in military parlance, no part of the force should ever lose touch of a field hospital or some section thereof; for carrying this out in its integrity transport is obviously essential. People are very apt to forget this fact, but it is the very pivot of the whole thing; the usefulness, the adaptability of a field hospital system to meet every requirement, is in direct ratio to its facility of movement. Let that be assured, and all is easy; the splitting up of a field hospital, be its size what it may, is entirely a question of pre-arrangement and packing; medical and surgical stores, *personnel* and material, in brief, should be capable of meeting the wants of ten or ten hundred patients. And the converse of all this is true; in proportion as you diminish the mobility do you impair the utility of a field hospital, until you deprive it of its essential character, and relegate it to the category of a stationary or base hospital, temporary or permanent, as the case may be. Another principle is that in proportion to the completeness of the organisation and the adequacy, an adequacy to superfluity, of the supplies at the base, will be the adequacy of the supplies distributed in front, and the completeness and facility of the working arrangements in rear. So self-evident are these statements that when reduced to writing they partake of the nature of platitudes. But let the reader remember that promptitude of action was a military necessity in this campaign; that before anything like all the troops had disembarked a portion of the force had marched to the front and fought; another portion had to be hurriedly disembarked and marched to their aid, in order to secure the water-supply and seize the railway; and that from first to last transport was a great difficulty, never entirely overcome, it is true, but diminishing day by day as more and more of canal and railway carriage became available and was in working order. If these facts be borne in mind as essentially necessary to the right understanding of what follows, much needless repetition will be avoided in a narrative not easily compressed at the best, when there is not, paradoxical as it may sound, time to make it shorter. The troops arrived at Ismailia on August 22nd and 23rd, and were actively disembarked on these and the following days. A palace—the Khedive's palace—was hastily turned into a hospital; it was a beautiful building, but a palace, and never intended for a hospital, and without the sanitary essentials or conveniences of one. A portion of a field-hospital, No. 3 field-hospital, under Surgeon-Major Beattie, was disembarked on the 23rd and took possession of this building, which had scarcely been done when the sick and wounded began to arrive. The work was very hard,—night and day and every day. Everything had to be extemporised from the materials at hand and as they came to hand. A very considerable amount of originality, ingenuity, and energy was brought to bear on the arrangements of this hospital, which in the course of a comparatively short time, after the arrival of the hospital ship *Carthage* on the 28th with the base hospital stores and establishment, became, at the time I saw it under Dr. Oliver Barnett, an admirable hospital—clean, beautifully ventilated, well supplied and well arranged, with a ward atmosphere as sweet and wholesome to the senses as the outside air. This hospital received all those coming from the front, and fed all the transports at Ismailia with their freights of sick and wounded for Cyprus, Malta, or England, the immense majority being sent straight to the latter destination. The amount of work performed at this hospital may be gauged by the fact that, as we were informed, 2667 patients passed through it in the course of a month, 500 or 600 of whom were wounded men. At this hospital a system of antiseptic surgery, as far as its principles admitted of prompt and practical application, was either adopted from the first, or, as in the case of those wounded at the battle of Tel-el-Kebir, continued where it had been already applied elsewhere. The large size of the central hall and staircase, the skylights of the corridors, made by the medical staff to communicate directly with the open air, and the nature of the climate admitting of the windows being kept open night and day, and the freest use of disinfecting agents in the dressing of wounds, kept the hospital air remarkably pure; and we can say, from personal knowledge, that the dry earth system with metal buckets, periodically removed, rendered that part of the building set apart for this purpose perfectly wholesome—in fact, the doors and windows of this part, allowing of free communication with the rest of the hospital, were fully open without any trace of bad odour being discernible. At this hospital arrangements had been pro-

vided for the segregation of cases of infectious disease; and a local sanitary service for Ismailia existed.

Passing over the military events of the 24th, 25th, and 28th of August, we come to those of, and immediately preceding, the battle of Tel-el-Kebir. Had there been ample transport—that is, an ample supply of horses, mules, and carriage—it is believed that the provision in England presupposed as many as five field hospitals, each capable of accommodating 200 patients; but it was clear that it was impossible to make this number available. The sandy character of the soil would not admit of wheeled vehicles for the removal of wounded. The General (Sir Garnet) had matured his plans and settled his strategy, the boldest, and best because the boldest, that could be adopted. On the night march, the attack at dawn of day, and subsequent events there is no need to dwell; but it is essential to bear in mind that the attacking force had the line of railway available in its rear, and a water-carriage system along the canal on its left flank. The medical arrangements were somewhat as follows:—Two field hospitals had been established at Kassassin lock, some eight miles by canal from Tel-el-Kebir. Half a bearer company was attached to each division during the action, and a special cacolet corps to the cavalry division. About eighty dhoolies and dandies with bearers accompanied the force. The Indian contingent advancing on the other side of the canal had its own arrangements. On the night of the 12th the stores and equipment for an advanced depôt field hospital were sent up the fresh water canal in a flotilla of cutters and flat-bottomed boats, ready to disembark at any point to be fixed upon, and daily supplies of ice were forwarded from Ismailia to Kassassin hospital, where medicines and medical comforts had been provided for the use of the wounded on their arrival from the front. The Surgeon-General was very early in the field directing the medical arrangements, and he subsequently rode over to Kassassin, to satisfy himself that the hospital there was prepared for the reception of wounded. The arrangements at the Tel-el-Kebir dam hospital seem to have answered well. The boats discharged their stores, a hospital of twenty-five tents was formed on a ridge contiguous to the fresh water canal, and the Geneva flag was hoisted on the top of an earth entrenchment evacuated by the enemy. The cutters and boats were thickly littered with hay and drawn up alongside the banks of the canal. From about 9 A.M. to 8.30 P.M. about 200 European patients were received and treated in the hospital, and forwarded in two batches to the Kassassin Lock Hospital. The system of water-carriage is admirably adapted for the transport of wounded men, and everybody was loud in praise of the navy for the careful forethought they brought to bear on the matter. Among the 200 wounded there were seven officers, five of whom were seriously injured, and about 200 cases of wounded Egyptians were also received and attended to, their wounds dressed and the patients prepared for transport by train to Cairo. A very successful attempt was made to administer systematically opium, either by mouth or hypodermically, to every wounded case. Supplies of fluid nourishment, water, and stimulants were also periodically furnished, and the wounds were all treated antiseptically. The wounded were conveyed on stretchers, dhoolies, or dandies, or litters and cacolets, from which they were not, as a rule, removed until their disembarkment at Kassassin Lock Hospital. At this hospital there was a staff of five medical officers with a civil surgeon, who undertook the preparation of all antiseptic solutions and dressings, in addition to three medical officers who came in with the wounded and temporarily aided the staff, the whole, including the transport arrangements, under the supervision of a deputy surgeon-general. Some of the wounded men struck the canal at a point lower down, owing to the field hospital having been passed on as far as practicable to the front, but these were picked up by the boats; and a number of men were transported by train direct to Ismailia, after having been dressed in the field. A large number of wounded Egyptians, in addition to the above, were collected on the field, and conveyed to a field hospital at Tel-el-Kebir railway station, where numerous operations were performed. Two hundred and two were sent to their homes, and the remainder, after being well supplied with necessaries, were sent by special train to Cairo under their own doctors.

As I began so I conclude. This campaign has been a rush from its beginning to its close; there has been no finality about anything; it has been here to-day, there to-morrow. No sooner had arrangements been made than a place, a camp, barrack, or hospital has been evacuated; the strain, physical and mental, is allowed on all hands by those who have had much experience of war to have been extreme; and now that the actual fighting and marching are over, the doctor's work has begun in real earnest. There is a normal life to everything, calculated upon its strength of material and its work, whether it be a railway carriage, a steam-engine, a beast of burden, or a man. We do not know how many campaigns a Special Correspondent is capable of going through, but a very few such campaigns as this would soon close the earthly career of an army doctor occupying a responsible position.

GLASGOW.

(From our own Correspondent.)

ARRANGEMENTS in connexion with our new Children's Hospital are so far advanced that the committee of management have advertised for a medical staff, an event which of course has caused no small excitement among those who think they have a chance of being elected. The hospital is one of eighty beds, and for this are required two visiting physicians, two visiting surgeons, an extra physician, an extra surgeon, and a resident medical officer. The candidates for these posts will be legion and the contest keen, though it is pretty generally understood that canvassing and similar annoyances are rather objected to by the committee who have the appointments in hand. Various guesses are in circulation as to the prospects of certain known candidates; in the meantime it is much easier to say who will *not* than who *will* be elected.

There was a death from hydrophobia in the Royal Infirmary last week, the case having run the usual rapid and fatal course. The patient had been bitten by a rabid dog as far back as the middle of March last.

An action for £500 damages has been commenced against Mr. M. G. Cluckie, Surgeon-oculist to the Ferguson Eye Infirmary, Greenock, and Mr. Dobie, house-surgeon to the infirmary. The child, a girl of seven years, died under chloroform before any operation had been performed. Proof in the case is fixed for November 2nd.

The condition and regulation of our tramway cars was very heartily and justly condemned at the last meeting of the Town Council, the discussion being raised by the medical officer's report in connection with whooping cough. Complaints had been lodged at the sanitary office that children suffering from that disease were admitted into the tramway cars, a proceeding which is certainly culpable in the highest degree. Many of the older cars, also, are extremely dirty and absolutely deficient in ventilation. Our cars, being public conveyances, should be better seen to.

SCOTTISH NOTES.

(From our own Correspondent.)

THE Aberdeen University Court last week adopted the following minute:—"The Court feels that it cannot quit the consideration of Dr. Pirrie's retirement without recording to his honour the character that he has borne throughout a very long career. Being identified with the very commencement of the Aberdeen Medical School, he has been largely instrumental in impressing upon it the stamp it now bears in the medical world. First, as a lecturer on Anatomy in Marischal College; and next, for the period of forty-three years as Professor of Surgery, he has necessarily had a leading part in the education of nearly two generations of medical graduates. His teaching has been characterised by a remarkable power of lucid and impressive exposition; while he spared no pains to make it demonstrative. His zeal and enthusiasm, combined with such teaching ability, effectually secured the attention of his students, by whom he will be respectfully remembered as one of their most valued instructors." Former students of Dr. Pirrie will

heartily endorse this admirable tribute; and it may not be amiss to state that many of them feel the present to be a suitable opportunity for permanently fixing the name of their beloved teacher in connexion with the university, by some substantial memorial.

Dr. Whitelaw's interesting experiment in keeping the public schools open during the epidemic of scarlet fever at Cupar, and in having the school authorities notified as to the families where the fever exists, has not proved successful, on account of "astounding carelessness, deceit, and concealment" on the part of the public. This being so, Dr. Whitelaw recommended the closing of the schools for a temporary period; but the sanitary committee has not seen fit to adopt this course. We have evidently here an example of what is to be expected when compulsory notification is made to bear upon parties other than the parents of the children affected.

The enormous success which Miss Clugston has met with in the West of Scotland in establishing convalescent homes was instanced in two directions last week. The report of the Dunoon Homes shows that during the past year 2599 convalescents have been admitted, 137 were at present in the institution, only two had died, and the remainder had been perfectly restored to health. The financial statement was favourable. Imitation is the sincerest flattery, and it would appear that the Hon. Mrs. Vernon has inaugurated a movement for the purpose of providing a children's convalescent home, to be situated on high ground near Troon. Very influential support is already promised.

The directors of the Fife and Kinross Asylum have agreed to record in their minutes an expression of the gratification felt by the Board at the satisfactory state of affairs shown in Dr. Turnbull's report for the year regarding the boarding-out of chronic cases and the enormous saving to the ratepayers thus occasioned. The twenty-five patients so dealt with represented relief to the assessment of a capital sum of £5000, while at the same time the expense to the parochial rate was lightened. Facts of this class are likely to be quickly appreciated by other directors, who may have hesitated long when the advantage to the patients of the boarding-out system was alone insisted on. The forcible suggestions of the Commissioners regarding this and other matters have been favourably referred to by the lay press in Scotland.

It appears that the quality of at least part of the Dundee water supply is rather suspicious. An exciting argument, lasting several hours, occurred a few days ago over a question as to whether samples from the three sources of the town's supply should be analysed, or whether but one should be so treated. Though a proposal with the latter view was carried, the result of the discussion will be that uneasiness will be felt regarding the quality of the waters, an analysis of which was so obstinately refused by the majority. The filtration of the Monikie water is estimated to cost £15,000.

IRELAND.

(From our own Correspondent.)

ON the 18th inst. (St. Luke's Day), the annual elections for President, Vice-President, and other office-bearers of the College of Physicians will take place. Dr. Johnston, having served two years as President, retires, and will be succeeded most probably by Dr. William Moore, late Professor of the Practice of Medicine in the School of Physic of the University of Dublin. Dr. Moore is a very distinguished physician, and there is no doubt his election will be favourably regarded by the profession. Dr. J. Magee Finny, the present Registrar, has, I understand, resigned, and Dr. J. W. Moore has been nominated for the post, the emoluments of which are about £100 per annum.

During last year 11,169 persons were inmates of district lunatic asylums in Ireland, of whom 8667 remained at the close of 1880, while 2502 were admitted during the year. The recoveries were 1019, and, if judged by the admissions, would stand at about 40 per cent., but if by the daily average of patients—namely, 8794—at not quite 11½ per cent. The mortality was 7 per cent., less by 0·25 per cent. as compared with last year. As regards the period of life when mental disorders become most manifest, the inspectors, from the various statistics at their command, place it between twenty-five and thirty-five, in which decade there exists, happily, greater power of recuperation than in any other. As, heretofore, the great characteristic, from a national point of view, between England and Ireland is to be found in the extraordinary difference between the number of married and widowed on the one hand, and the single on the other—viz., 2614 and 6000 respectively, while in 364 the special condition was not ascertainable. No adequate explanation has ever been given of this disparity in the social condition of Irish lunatics.

It is expected that a memorial will shortly be erected to the late Dr. William Thompson, of Lisburn, whose sudden death I referred to recently in these columns. That something of the kind will surely take place there is little doubt, but what the form may be has not yet received any definite shape. It has been suggested that the most useful and appropriate memorial would be a new surgical hospital for Belfast, to be called, for example, the "Thompson Memorial Surgical Hospital," to perpetuate the name of a very distinguished member of the profession. The population of Belfast is about 208,000, and yet there is only one general hospital in the town, which is rapidly increasing in wealth and population. The beds for medical and surgical relief available only amount to 160, which, compared with 350 beds in Cork with a population of 100,578, and other places, show that instead of one general hospital, Belfast requires at least treble its present accommodation.

The memorial window to the late Dr. Edward Peele, whose untimely death from typhus fever was so much regretted, has been erected in St. Patrick's Cathedral, Dublin.

In consequence of the enforced resignation of Dr. O'Reilly, medical officer of Lismore Workhouse, an election for his successor took place last week. There were four candidates, and ultimately Dr. Denneby was elected.

Dr. E. H. Byrne, one of the medical officers of the South Dublin Union, who is about leaving Dublin and intends practising in Australia, was this week presented by his friends with a farewell address. Among those present were several members of Masonic Lodge 245, with which Dr. Byrne was connected, and who presented him with a past-master's jewel and a royal arch jewel.

During the quarter ended June 30th, there were registered in Ireland 32,679 births, equal to a rate of 23·7; and 22,874 deaths. In the same period 45,105 persons emigrated; so that a decrease of 35,300 would appear to have taken place in the population. The registrars report the death of five persons from hydrophobia during the quarter, and refer to the prevalence of rabies in dogs and other animals in twenty-six districts. The information concerning this disease was obtained in reply to a special query addressed to the registrars to furnish any information within their knowledge regarding the prevalence of the disease, and they supplied accurate and recent information to the Government regarding this fatal affection.

Dr. Beamish, who for nearly fifty years held the post of Physician to the Cork Fever Hospital, has been presented with a handsomely illuminated address on the occasion of his retirement.

Mr. John S. McArdle has been appointed Surgeon to St. Vincent's Hospital, Dublin, in the vacancy caused by the resignation of Mr. Kehoe.

PARIS.

(From our Paris Correspondent.)

As you are an uncompromising enemy to homœopathy, or anything savouring of quackery, I send you the following extract from the writings of Orfila, which you may consider worth reproducing in THE LANCET:—"The mandates I frequently received from courts of justice to analyse medicines compounded and delivered by homœopathists have enabled me to affirm that there existed no appreciable substance whatever in the pretended homœopathic remedies; or if, by chance, the analysis revealed any substance in a certain number of them, the quantity was so small that it may be considered *nil*; but I know also, and I affirm it on my honour, that, having little confidence in a system which cannot produce good results in a great many

acute affections, many homœopathists administer medicines in allopathic doses, so that the system of Hahnemann is adopted and practised by two sets of individuals. The one who have an unlimited faith in it, practice it without any restriction, and abandon their patients to themselves without taking into consideration the innocuousness, often murderous, of medications which they prescribe; these are pure and fanatical homœopathists. The other, less dangerous when it concerns the treatment of acute maladies, may be qualified clever homœopathists, as they act on the imagination of their patients by the administration of a few globules of extreme dilution, and consequently insignificant at the same time; they bleed, apply leeches, blister, prescribe corrosive sublimate, opium, copaiba, in rational doses, the good effects of which soon become apparent." What was written by the celebrated medical jurist more than a quarter of a century ago holds as good now as it did then.

In a very interesting paper by Dr. Magnan, one of the physicians to the Sainte-Anne Asylum, on the treatment of epileptic patients, he gives the following useful advice:—One should not be in a hurry to set at liberty an epileptic patient who, in previous attacks, had committed acts of violence, as it should not be forgotten that he is liable to commit others in analogous circumstances. If at the commencement they have not been followed by any serious consequences, it is rare that they do not end by being attended with some terrible effects. This, however, is very different from the case of patients affected with melancholy, for they hesitate for a long time before they attempt to commit suicide. Many of these latter are even obliged to drink some intoxicating liquor to excite themselves in order to have the courage to accomplish the act to which they have so much repugnance, and of which they were perfectly conscious, whereas the confirmed epileptic acts otherwise.

Dr. Bourneville, physician to the Bicêtre Asylum, after several experiments to ascertain the effects of the bromide of ethyle in cases of hysteria and epilepsy, has come to the following conclusions: 1. The dilation of the pupil at the commencement of the inhalations of the bromide of ethyle is not constant. 2. The complete muscular resolution is exceptional. 3. Anæsthesia is produced in different degrees, according to the subjects experimented on. 4. The temperature, the secretions, and the general state of the patient do not appear to undergo any modification. 5. The pulse and the respiration are slightly accelerated. 6. Trembling of the limbs in a more or less marked degree during the inhalation may be produced, but it does not persist after the cessation of the inhalation. 7. Hysterical attacks are in general easily arrested by the bromide of ethyle. 8. Epileptic fits may sometimes be arrested by administering the medicine at the commencement of the tonic stage; more frequently, however, the inhalations produce no effect. 9. In epilepsy the regular employment of the bromide of ethyle, administered by inhalations daily during one or two months, greatly diminishes the frequency of the attacks.

All medical men know that it is impossible to touch or titillate the mucous membrane of the larynx without producing very marked reflex effects. The glottis contracts spasmodically, and the whole of the larynx is drawn up with violence. When this organ is irritated by a current of carbonic acid, or by the vapours of chloroform, besides the local reactions, a general state of agitation is noticed. These two anæsthetic agents act nearly in an equal degree in this respect, and irritate very violently at the commencement. When, however, they are applied to the larynx for a few minutes the irritating effects of one or the other become *nil*, or considerably reduced. This is particularly the case with carbonic acid. The above have been the results constantly obtained by Prof. Brown-Séquard by experiments performed by him on animals; and in a paper read by the learned professor at the Academy of Sciences last week he expressed the hope that this discovery would enable medical men to introduce a tube into the larynx, or even the trachea, with impunity. Prof. Brown-Séquard did not notice any bad effects, either local or general, to have been produced by the carbonic acid; neither was there any manifestation of mechanical irritation of the larynx or the trachea in his experiments. He, however, enjoins further researches on the subject before applying carbonic acid in the manner above described, and the institution of further experiments, with the view of ascertaining positively the innocuousness of introducing into the human subject, by the mouth or nostrils, a large quantity of carbonic acid. It is known, he added, that this gas determines cephalalgia, giddiness, &c., and that a very rapid current of this agent may be applied to the back of the mouth or fauces without producing any dangerous effects. Nevertheless, it is essential to reproduce the experiments, with the view of ascertaining the anæsthetic effects of carbonic acid on the mucous membrane of the larynx.

Paris, October 10th, 1882.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on Oct. 6th:—

Appleton, Harry, Lizard, Cornwall.
Bartlett, Benjamin Pope, Hastings.
Piesse, Charles Henry, New Bond-street.
Rouse, Rolla Edward, Woodbridge Rectory.
Winter, Thomas Bussell, Werter-road, Putney.

The following gentlemen also on the same day passed the Primary Professional Examination:—

Evan David, London Hospital; George Frederick Hentch and Alfred Joseph Reeve Tyler, Charing-cross Hospital; Arthur Edw. Lyster, St. Bartholomew's Hospital.

THE BRITISH MEDICAL BENEVOLENT FUND.—A donation of £100 has been received by the Treasurer of this Fund from Dr. Beaney of Melbourne.

ST. THOMAS'S HOSPITAL MEDICAL SCHOOL.—The Entrance Scholarships in Natural Science have been awarded as follows—viz., Scholarship of £100 to Mr. Horace Duncan; Scholarship of £60 to Mr. E. D. Shirtliff.

QUADRUPLE BIRTH.—The wife of a navvy at Pontypridd has been delivered of four fully developed living children at a birth. None of them, however, survived more than a few hours.

A STRONG opposition is being manifested against the erection of chalets in the centre of the road at Ludgate-circus. A deputation has waited upon the Commissioners of Sewers, who lease the site to the company at the nominal rent of £10 for five years.

SCURVY ON BOARD A PASSENGER SHIP.—Lloyd's agent at Natal reports, under date Sept. 11th, that the *Bylgia* (Captain Anderson), from Hong Kong for Algoa Bay, with 127 Chinese passengers, put into Natal on Sept. 9th with scurvy on board. There had been twenty-four deaths.

AT the quarterly meeting of the Directors of the Naval Medical Supplemental Fund, held on the 10th inst., Sir W. R. E. Smart, K.C.B., M.D., Inspector-General, in the chair, the sum of £75 was distributed among the several applicants.

LONDON HOSPITAL MEDICAL COLLEGE.—Mr. Hugh Smith has obtained the Entrance Science Scholarship of £60; Mr. E. Barclay Smith the Entrance Science Scholarship of £40; Mr. L. Raly the Buxton Scholarship of £30; and Mr. F. R. Ozzard the Buxton Scholarship of £20.

SEVERAL milk-sellers in Manchester have been amerced in heavy penalties for the adulteration and dilution of milk. One sample was described as consisting of forty parts of skim milk and sixty parts of water containing colouring matter!

SOCIETY OF MEDICAL OFFICERS OF HEALTH.—The first meeting of the session will be held at 1, Adam-street, Adelphi, on Friday, Oct. 20th, at 8 P.M., when the President, Dr. Tripe, will deliver an Inaugural Address on "Some of the relations between Meteorological Phenomena and Man."

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—The following gentlemen have been elected office-bearers for the session 1882-83:—President: Mr. G. H. Cable. Vice-Presidents: Dr. A. Forsyth, Mr. J. Marshall. Council: Mr. A. L. Bowen, Mr. J. E. Burroughs, Dr. F. C. Fisher, Mr. J. Hammersley, Mr. C. H. Hartt, Mr. F. Moon, and Mr. J. P. Purvis. Treasurer: Dr. P. Purvis, Secretary: Mr. H. W. Roberts. Librarian: Dr. Saundry.

PRESENTATIONS.—Mr. David Richards having recently resigned his post as medical officer to the workhouse and industrial schools, Brighton, the officers of the former establishment have presented him with two cases containing respectively a dozen silver bladed ivory-handled dessert knives and forks and half-a-dozen fish knives and forks to match. The presentation was accompanied by a letter expressive of the high respect and esteem in which Mr. Richards was held by the donors of the gift.—On Friday the 29th ult., Dr. Charles Brown, of Eastbourne, was presented by Mr. F. W. H. Cavendish on behalf of a number of patients with a handsome gold chronometer. chain, and locket, value seventy guineas. The watch bore the inscription "Presented to Dr. C. R. Brown by his patients, in token of their esteem. Eastbourne, 1882."

SOIRÉE AT GUY'S HOSPITAL.—At Guy's Hospital there was, on the 2nd inst., a brilliant conversazione, at which there was a larger attendance than on any previous occasion. The decorations supplied by Messrs. Gillow were extremely handsome, especially the central drawing-room, which was upholstered in various oriental materials, giving to the whole a most luxurious aspect. Owing to the kindness of Messrs. Siemens the electric light was employed in all those parts of the buildings and grounds used for conversazione purposes; it was peculiarly clear and steady, and worked the whole evening without any misadventure. The object of most of the scientific exhibits was to popularise Mr. Francis Galton's ideal anthropometric laboratory. Thus, at one table, visitors could have their acuteness of vision for form or colour tested, at another their hearing and tactile powers were examined, at another their blood was analysed, and lastly their personal equation was determined. One of the attractions of the evening was the telephone-room, fitted up by the United Telephone Company, in which it was possible to hear the music of "Patience" at the Savoy Theatre, and also to talk with people at the London Hospital. In one of the rooms a very good band played a capital selection of music. During the evening the Right Hon. Lord Justice Bowen, one of the governors of the hospital, distributed the prizes.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BENSON, ARTHUR H., M.B. Univ. Dub., L.R.C.S.I., has been appointed Medical Officer to the Dublin Throat and Ear Hospital, vice Bertram C. A. Windle, resigned.

BROOK, WILLIAM FRED., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Fareham District and Workhouse of the Fareham Union, vice Barnard, resigned.

BYRNE, W. S., M.B., M.Ch. T.C.D., has been appointed Surgeon-Superintendent to Prince Alfred Hospital, Sydney, New South Wales.

CONNON, CHARLES JAMES, M.B., M.S. Aber., has been appointed Medical Officer for the Tenth District of the Hexham Union.

CONRY, J. T. CROSBIE, L.F.P.S.Glas., L.K.Q.C.P.I., has been appointed Medical Superintendent to the new Infirmary at Hope, Salford.

DUNNE, ALEXANDER, L.R.C.P.Ed., L.R.C.S.I., has been appointed Medical Officer to the Portaferry Dispensary District, vice Filson, deceased.

EAGLES, WOODFIELD, M.R.C.S., L.S.A.Lond., has been appointed Surgeon-in-Ordinary to the Bucks General Infirmary, vice Ceely, resigned.

FLINN, DAVID EDGAR, L.K.Q.C.P.I., L.R.C.S.I., & L.M., has been appointed Surgeon to St. Michael's Hospital, Kingstown, Dublin.

FOSTER, PHILIP, M.D. St. And., M.R.C.S., has been appointed Honorary Physician to the Yorkshire Preparatory School for Deaf and Dumb Children, Leeds.

GORDON, JOHN J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Assistant Medical Officer to the Infirmary and Workhouse, Hackney Union.

HEWETSON, H. BENDELACK, M.R.C.S., has been appointed Honorary Ophthalmic and Aural Surgeon to the Yorkshire Preparatory School for Deaf and Dumb Children, Leeds.

JONES, ROBERT, M.B.Lond. &c., has been appointed Assistant Medical Officer at Colney Hatch Asylum (Female Department), vice Dr. Cobbold, appointed Medical Superintendent of Earlswood Asylum.

LLOYD, RICKARD W., M.R.C.S., has been appointed House-Surgeon to St. Peter's Hospital for Stone &c., Berners-street, W.

MACDONNELL, MARK ANTHONY, M.D., M.Ch. Q.U.I., has been appointed Honorary Medical Officer to the South Dispensary, Liverpool, vice McGrath, resigned.

MORGAN, E. RICE, M.R.C.S. &c., of Morriston, has been appointed Medical Officer to the Swansea Truants' Industrial School.

O'CONNOR, FREDERICK, L.K.Q.C.P.I., L.R.C.S.I., has been reappointed Medical Officer of Health for the March Urban Sanitary District.

REYNOLDS, ROBERT, M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer for the Fourth District of the Halstead Union.

ROUÉ, W. BARRETT, M.B., M.S.Dur., has been appointed an Examining Physician to the Scottish Imperial Life Assurance Company.

ST. GEORGE, GEORGE LOMBE, L.K.Q.C.P.I., L.R.C.S.Ed., has been appointed Surgeon to the County Antrim Infirmary, vice Thompson, deceased.

STODDART, Mr. F. W., has been reappointed Public Analyst for the Borough of Bridgwater.

STREET, ALFRED FRANCIS, M.A., M.B.Cantab., M.R.C.S., has been appointed Senior Resident Medical Officer to the Radcliffe Infirmary, Oxford, vice T. E. Hine, M.B., resigned.

Births, Marriages, and Deaths.

BIRTHS.

COLTART.—On the 6th inst., at Ashbourne House, Epsom, the wife of William Wilson Coltart, L.R.C.P.Lond., M.R.C.S., of a daughter.

CROSS.—On the 5th inst., at Stanhope-terrace, N.W., the wife of John Cross, B.A., M.D.Cantab., of a son.

DEAKIN.—On the 6th ult., at Allahabad, N.W.P., India, the wife of Surgeon C. W. Shirley Deakin, F.R.C.S.Eng., Junior Civil Surgeon, of a son.

GOULD.—On the 7th inst., at Queen Anne-street, Cavendish-square, the wife of A. Pearce Gould, F.R.C.S.Eng., of a daughter.

LEONARD.—On the 7th inst., at Camden-road, the wife of H. Leonard, M.B., of a son.

SPENCE.—On the 6th inst., at St. Ninians, Burntisland, Fife, the wife of Robert Spence, M.B., of a son.

THATCHER.—At Albany-street, Edinburgh, the wife of Charles H. Thatcher, F.R.C.S.E., of a daughter.

WATHEN.—On the 7th inst., at Coburg Villa, Richmond-hill, Clifton, the wife of John Hancocke Wathen, L.R.C.P.E., of a daughter.

MARRIAGES.

HARRIS—CHALLINOR.—On the 3rd inst., at St. Edward's Church, Leek, Staffordshire, James Penn Harris, F.R.C.S., of Liverpool, to Sarah Rosamond, daughter of the late Charles Challinor, Esq., of Liverpool.

HAWARD—WALKER.—On the 30th August, at the Parish Church, Knightwick, Edwin Haward, M.D.Ed., M.R.C.P.Lond., F.R.C.S.E., of Harley-street, Covendish-square, W., to Mary, eldest daughter of the late John Smith Walker, Esq., of Knightwick Manor, Worcestershire.

HOCKIN—CLOW.—On the 3rd inst., at St. Mark's, Hamilton-terrace, G. Treverno Hockin, M.R.C.S., L.R.C.P., fourth son of John Hockin, of Amersham House, Beckenham, to Cordelia Fanny, fifth daughter of the late Leonard Clow and Mrs. Clow, of Upper Hamilton-terrace.

JOHNSTON—MEDCALF.—On the 5th inst., at Loven, Augustus Johnston, M.B. T.C.D., M.R.C.S., of Gale House, Ambleside, to Judith Anne, younger daughter of the late W. Medcalf, of Broughton House, Newton-in-Cartmel.

LLOYD—HERMAN.—On the 4th inst., at St. Peter's Church, Tiverton, Devon, James Hellings Lloyd, M.R.C.S.E., L.R.C.P.Ed., of Collumpton, Devon, youngest son of the late Rev. J. D. Lloyd, Rector of Clare Portion, Tiverton, to Marian (Minnie) Armytage, only child of the late M. Herman, Esq., of Bath.

NIND—HARVEY.—On the 3rd inst., at St. Mary's Church, Vernon Pitt, second son of the late Philip Pitt Nind, M.R.C.S., of Torquay, to Jane (Jeanie), eldest daughter of John F. Harvey, Esq., of Earlham, St. Mary's Church.

REID—TURNBULL.—On the 4th inst., at Friar's Bank, Dunbar, by the Rev. Robt. Buchanan, James Reid, M.B., of St. Helen's, Lancashire, to Susan, younger daughter of the late John Turnbull, M.D., of Dunbar.

SAUNDERS—BARNES.—On the 11th inst., at St. Mary's Cathedral, Edinburgh, by the Rev. Fitzroy Kelly Lloyd, Incumbent of St. John's, Pittenweem, Frederick Anastasius Saunders, L.R.C.P.E., L.R.C.S.E., to Mary Emily Louisa, only daughter of the late Captain Edmund Charles Barnes, H.M. late 8th Helena Regiment.

SCATLIFF—FRIEND.—On the 4th inst., at Clermont Congregational Church, Preston-park, Brighton, Arthur W. Scatliff, M.D., of Margate, to Lilie, third daughter of Daniel Friend, Esq., of Stoneleigh, Preston-park, Brighton.

WOODS—PITTAR.—On the 4th inst., at St. Peter's, Brighton, Thomas Arthur Woods, B.A., M.B., L.R.C.S.I., L.M., of Douglas, Isle of Man, to Elizabeth (Bessie) Marmion, daughter of Thomas John Pittar, Esq., of St. George's-terrace, Brighton.

DEATHS.

RISDON.—On the 6th inst., at the house of his sisters, Bideford, North Devon, Robert Risdon, M.R.C.S., late of James-street, Buckinghamgate, aged 58.

SCOTCHBURN.—On the 6th inst., at Great Driffield, Alfred Scotchburn, M.R.C.S., aged 55.

SETH.—On the 5th inst., at Tisbury-road, West Brighton, Owen Seth, F.F.P.S.Glas., Assistant-Surgeon to the 1st Surrey Artillery Volunteers, son of the late C. G. Seth, Esq., of Calcutta.

TURRELL.—On the 4th inst., at Windsor, Samuel Turrell, M.D.Edin., aged 60.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 5.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Oct. 12th, 1882.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 5.30 A.M.
Oct. 6	30·19	E.	57½	54	78	61	50	·05	Overcast
" 7	30·00	S.E.	55	53	80	61	50	·05	Overcast
" 8	30·06	S.E.	55	51	82	63	46	..	Hazy
" 9	30·18	E.	57	55	102	66	50	..	Foggy
" 10	30·11	S.	55	53	..	63	49	..	Foggy
" 11	29·71	S.	58	57	..	61	51	..	Overcast
" 12	29·49	W.	53	51	..	56	47	·33	Overcast

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

Lectures, original articles, and reports should be written on one side only of the paper.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

THE ABUSE OF "OLD" DIRECTORIES, &c.

IN common with the members of other professions, medical men are insulted, and not unfrequently to some extent defamed, by the insolence of advertising tradesmen who, not content with misdirecting their multitudinous circulars by the use or abuse of "old" Directories, have the effrontery to address their missives to "Mrs. ——," assuming that the practitioner must needs have a wife! If the commercial community could be convinced of its reckless folly in this matter of circularising, much money which is now wasted would be saved. The use of the old Directories is a great nuisance. We have quite recently heard of instances in which urgent letters requesting consultations have been directed to old addresses which have been wrong for three or four years at least. Better have no Directory than an old one, and better not send out circulars at all than address them to wives who have no existence.

Tyro.—Such an arrangement is not very satisfactory. It is not an open one, and involves something like a partnership with a druggist.

DEATH CERTIFICATES.

To the Editor of THE LANCET.

SIR,—The following is a reply to my inquiry as to what constitutes attendance, and also what course a doctor must adopt in those numerous cases in which one visit only is made before death. You will notice that the registrar's ruling and that of a magistrate do not coincide, and a doctor is in an awkward predicament between the two.

I am, Sir, yours faithfully,

The Poplars, Patricroft, Oct. 10th, 1882. E. H. ROE.

"General Register Office, Somerset House,
"London, W.C., Oct. 9th, 1882.

"Sir,—I am directed by the Registrar-General to acknowledge the receipt of your letter of the 8th inst., and to state that the Registration Act of 1874 (section 20) provides that, 'In case of the death of any person who has been attended during his last illness by a registered medical practitioner, that practitioner shall sign and give to some person required by this Act to give information concerning the death a certificate stating to the best of his knowledge and belief the cause of death.'

"It is impossible, under the varying circumstances attending medical treatment, for the Registrar-General to express any opinion as to whether one visit before death is or is not sufficient to warrant a medical man granting a certificate of the cause of death. The medical attendant is the best judge in such a matter; the Act only insists that he shall have been in attendance during the last illness.

"I have the honour to be, Sir, your obedient servant,

"WILLIAM CLODE, Secretary.

"To Edwin H. Roe, Esq., The Poplars, Patricroft."

AN ALARMING POLICE ECONOMY.

IT has transpired, and should be generally known to the public, that, with a view to reduce the police-rates, instructions have been issued to refrain from calling in a medical man to the aid of the "drunk or dying" at police stations unless the inspector on duty declares such a step necessary. The effect of this restriction has been, during the last year, to place the discrimination between the effects of drink and disease in the hands of policemen, who are supposed to have acquired some special knowledge and new power of diagnosis in the course of a brief instruction by the St. John Ambulance Society.

"FEEDING LUNATICS."

To the Editor of THE LANCET.

SIR,—I am pleased to observe from your annotation of the 7th inst. that we do not, after all, differ very widely on this subject; you admit two points for which I argued—viz., that forcible feeding is necessary, and that "there are cases in which it is necessary to use the tube." You hold "that it is because the task of inducing lunatics to feed naturally is left to attendants the need for forcible feeding arises." I practically stated in my last letter that this task should be carried out under medical supervision, and not unfrequently actually undertaken by the doctor himself.

I think with you that "no medical man could possibly stand by and see a patient die of starvation rather than use the tube;" but I believe that the result of the unwillingness of some medical men to use the tube, if it can possibly be avoided, is that the operation is sometimes deferred too long, and that thus the opportunity of saving life is occasionally lost, just as it may be in certain cases by deferring a tracheotomy or a herniotomy. The patient is sometimes only fed with the tube when his vital powers have sunk so low that they cannot recover themselves. The death in such a case is rightly certified as being due to "exhaustion from mania" or "exhaustion from melancholia," as the case may be; but the patient might possibly have withstood the exhausting effects of his disease if he had been earlier supplied, by means of the tube, with the large amount of nutriment which the system requires under such conditions. It is probable that the patient has been diligently plied with food administered with the spoon, or by some other method of feeding; but in very bad cases it may happen that the result of an hour's continued effort is that the patient has only swallowed an ounce or two of liquid, whereas with the tube a pint or more of fluid food may always be administered in a few minutes. The latter method is far less exhausting to the patient, and there is no doubt about the food reaching the stomach.

It is often a most difficult point to decide when the tube should be used; no two cases are precisely alike, and there is frequently room for a difference of opinion on the subject. It is possible that in some asylums the tube is, as you believe, too freely used; but I feel very strongly that there is, on the other hand, a great and real danger of deferring its use until the patient is too exhausted to benefit by it. If, however, medical men do err in this matter, I quite agree with you that they do so "with the most earnest desire to benefit their patients."

The full discussion of this subject is probably more suited to a journal whose pages are devoted specially to subjects connected with the care and treatment of the insane; but since you raised the question in your columns, it seemed to me only right that your readers should have the opportunity of hearing both sides of the question.

I am, Sir, your obedient servant,

Earlswood Asylum, Oct. 9th, 1882. CHAS. S. W. CORBOLD.

Mr. J. Thomas.—There is some unaccountable delay in the issue of this report to the public, but it can be obtained from Messrs. King, Parliamentary Booksellers, King-street, Westminster, S.W.

Dr. J. H. Bell.—Thanks.

Dr. Peacock's paper will appear in an early number.

Wm. Powell, M.B., has forgotten to enclose his address.

"INTRA-VENOUS INJECTION OF FLUID IN SEVERE HÆMORRHAGE."

To the Editor of THE LANCET.

SIR,—In reply to your correspondent, Dr. Philip Foster, of Leeds, permit me to point out that for intra-venous medication, absolute alcohol is preferable to brandy, as being purer, the latter agent containing œnanthic ether and volatile oil, together with colouring and other matters derived from the cask, in which it has been kept, besides the frequent addition of burnt sugar. The employment of salt instead of a saline powder of the formula advocated by me (THE LANCET, Sept. 16th, 1882, p. 437) might answer the purpose, but I submit it is preferable to use a powder which imitates approximately the salts of the blood.

The advantages of my syphon over the common obstetric syringe are—first, the almost impossibility of admitting air; and, secondly, the greater uniformity with which the medicated fluid can be introduced into the venous system by it. Moreover, the idea of using for the operation of intra-venous injection an instrument which a few hours previously may have been employed for the administration of a nutrient or purgative enema for the purpose of cleansing the uterine cavity in a case of pyæmia by means of a carbolised douche, or as a method of arresting post-partum hæmorrhage by the injection of perchloride of iron, is not to me a pleasant one.—I am, Sir, yours faithfully,

CHARLES EGERTON JENNINGS.

London Hospital, E., Oct. 6th, 1882.

THE TREATMENT OF THE WOUNDED ON THE "MALABAR."

THE following important letter, testifying to the humane treatment received by the sick and wounded on board the *Malabar*, appears in the *Pall Mall Gazette* of Tuesday last:—

To the Editor of the Pall Mall Gazette.

SIR,—A paragraph in a local paper has just come under my notice, quoting a correspondent of the *Pall Mall Gazette*, who "calls attention to the shameful manner in which the wounded were neglected on board the *Malabar* during their passage home." He is further said to have stated "that some of the men did not have their wounds dressed from the time they left Alexandria till their arrival at Portsmouth." What opportunities your correspondent may have had of verifying the terrible accusations he brings against the surgeons entrusted with the care of the wounded on board the *Malabar* I know not; I can only say that as a passenger in that ship I spent on an average an hour daily with the sick and wounded on board, and can unhesitatingly assert that within my experience I have rarely seen more assiduous care bestowed by the doctors on those under their charge than was the case on board the *Malabar*. Going about as I did as far as possible as the men's friend, and being in no way connected with the army, I naturally heard complaints from time to time from the men's lips. Many men regretted leaving the superior comforts of the hospital ship *Carthage*, mentioning especially the loving care with which they were nursed there by the lady nurses who have so nobly volunteered their services in a burning Egyptian climate; some, too, complained that they should have liked more to eat—low diet, is, I believe, necessary where there is any risk of inflammation; and many were anxiously looking forward to the change from the necessarily somewhat crowded quarters on board to the airy wards of Netley Hospital. But I never heard one word of complaint against the doctors; while, on the other hand, I particularly remember one day, when telling the men that the doctor was rather sea-sick, their warm expressions of sympathy with him, saying, "He is so kind to us," &c. I hope, Sir, that by inserting this letter you will do your best to repair the cruel wrong that has been done to those in charge of the wounded. I shall be glad to give your correspondent any information I can on the subject. I enclose my card, but must sign myself,

A PASSENGER ON BOARD THE "MALABAR."

South Petherwyn, October 10th, 1882.

"DRAIN-PIPES: A QUERY."

To the Editor of THE LANCET.

SIR,—In answer to the query of "M.D.," in your journal of Sept. 30th, as to the above, I should imagine the increased luxuriance of the grass was simply the result of thorough drainage and deep cultivation. When the drain is cut and the pipe laid in, the opening is filled up with the earth previously dug out. This is deep cultivation, and the pipe carrying off the superfluous water, the soil between the pipe and the surface being freed from water, would be of a slightly warmer temperature, and thus increase the growing powers of the soil; hence the luxuriant appearance. Let "M.D.," when the ground is covered with snow, watch the three drains, and he will possibly find, on a thaw setting in, that the snow will disappear along the line of drains sooner than on the adjoining ground, no doubt the result of a drier and somewhat warmer soil. I may mention that about forty years ago I superintended the cutting of over one hundred miles of drains.

I am, Sir, your obedient servant,

Oct. 2nd, 1882. G. J.

To the Editor of THE LANCET.

SIR,—I have observed a similar appearance as your correspondent, "M.D.," and concluded that the increased luxuriance in the growth and deeper tint of the grass depended on the subsoil having been changed during the process of laying the drain-pipes; that portions which were previously deeply buried had been brought near to the surface, and had supplied a new pabulum to the roots of the grass.

I am, Sir, yours, &c.,

Taunton, Oct. 5th, 1882. WM. KELLY, M.D.

Mr. Thos. Richardson.—The name of the institution mentioned is not included in the "Medical Register and Directory of the United States."

V. J. is referred to a general announcement in another column.

EXTRA FEES FOR INSTRUMENTAL LABOURS.

To the Editor of THE LANCET.

SIR,—With regard to the above, I should be glad to know whether it is the practice of Boards of Guardians to allow them to workhouse medical officers, for such I take Dr. Barnes to be.

A short time ago I was refused an extra fee in a case of that sort, and I wrote to the Local Government Board on the subject. The answer I received was that the regulation about extra fees only applied to district medical officers; and the same rule, I take it, applies to the surgical fees for accidents and operations—at least the regulation seems to exclude the union medical officer altogether. Are medical officers of workhouses aware of this ruling, which certainly gives them no encouragement to undertake any operation requiring assistance and involving time and trouble? I could get no reason from the Local Government Board for any difference being made between district and union medical officers, and should be glad to know if in your opinion any sufficient one exists.—I am, Sir, faithfully yours,

Salop, Sept. 27th, 1882. WORKHOUSE MEDICAL OFFICER.

THE BANGOR EPIDEMIC.

WE have received a communication from the Clerk to the Bangor Local Board of Health denying the accuracy of certain statements which we felt it our duty to make with regard to such matters as the tardiness of the Board in taking the measures necessary to stay the spread of the enteric fever outbreak. Owing to the tone and character of the communication we defer inserting it until our next issue, when we hope the official report on the outbreak will have been issued, and when, we feel convinced, every statement we have made will be fully confirmed.

A Friend of the I.W.D.—Our correspondent's strongly worded letter is based upon a mere rumour, the correctness of which is, to say the least, doubtful.

W. Easby, M.D., is thanked, but we must decline to notice the man or his effusions.

THE USE OF TOBACCO.

To the Editor of THE LANCET.

SIR,—In reply to your query of last week, allow me to give my experience. It is only the observation of myself, and so not of much import; but if each or many members of our profession will send their experiences, we may be able to draw certain conclusions.

I started smoking about the age of eighteen, and did so that I might be like my fellow-students. My first cigar made me very ill. I was sick, purged, and very dizzy, had griping pains in the abdomen, violent palpitation, and came out in hot and cold sweats. The smell of tobacco after that was distasteful for a time, but being determined to become a smoker, I tried again and again, until I could smoke without great discomfort. I had many minor attacks of vertigo during my time of learning. I smoked first after tea only, then whilst tea was making, then after dinner, and so on until I could smoke any time of the day. I also found as the time for smoking came round I wanted to smoke; I had a craving which nothing but tobacco would satisfy. I continued smoking for about four years, during which time I had many minor complaints which I have lost since leaving it off. It often brought on palpitation, which I never have now. I am myopic from early study, but a pipe of tobacco would sometimes make me more so. In other words, a smoke would entirely destroy the effect of my glasses, and when I had them on after a smoke I could only see as far as when I had them off on an ordinary occasion. Again, at night time I had cramp in the muscles of the calf and of the sole of the foot. If I left off smoking for a few days I noticed this became less, and when I left it off entirely the cramp went also, and I have never had it since. If I smoked more than usual the cramp extended to the muscles of the thigh and back of the hand. On one occasion, after a heavy smoke, it seized the muscles of the jaw whilst I was yawning, and kept my mouth open; I had to shut it forcibly. I was also troubled with subsultus tendinum, or a sudden twitching of the muscles of the lower extremities. This even would spread to the whole body, and when asleep or falling asleep I was often awakened by a sudden twitch of the whole body, as if an electric shock had been given me suddenly. This I have never had since I left off smoking. The cramp is often seen after severe purging or vomiting, and the subsultus in children when they are feverish. I expect both are due to some irritation of the solar plexus; some physiologist will no doubt set me right. After a smoke my handwriting became very strange; the letters were not firmly made, but wavy, like the handwriting of an aged or infirm person.

Others I find are sometimes subject to the same sensations as I was. To many it is the cause of sore throat and indigestion. One case attracted my notice, which I think is almost unique. A youth in a sawmill got many small cuts about his hands, and they would not heal. He consulted me about them. I tried protective measures and tonics with no result. These cuts continued for some months, and would not heal. One time he was very busy and ran out of tobacco; he did not smoke for three days, and to his surprise he found his wounds healing. He stopped smoking, and in nine days they were perfectly healed. He then started smoking again, got some more cuts, and they would not heal; so he left off smoking, and they rapidly healed. He then came to the conclusion that it was not good for him to smoke, and he has left it off. Now his cuts heal the same as those of others. Smoking, again, is often a mannerism, the same as scratching the head or biting the nails, of a more harmful kind though.—I remain, Sir, yours truly,

T. R. ALLINSON, L.R.C.P. Ed., &c.

Kingsland-road, E., Oct. 3rd, 1882.

J. V. R. C.—We regret that we cannot afford the space for our correspondent's letter. We entertain doubts of the advantage which in his opinion would be gained by the adoption of his suggestions.

A Student will doubtless gather from the Students' Number the information he desires.

A QUERY.

To the Editor of THE LANCET.

SIR,—Can any of your readers throw light upon a case where there is a discharge of printer's ink from the great toe near the nail, the lesser toes being inflamed at the top on the palmar aspect. The lesser toes of the other foot are also affected—red, and with a severe pricking pain. It is thought to be an exceptional case. Is it so? How is this discharge produced? There is no fœtor.—I am, Sir, yours truly,

Appledore, North Devon, Oct. 8th, 1882. F. PRATT, M.D.

MEDICAL PORTRAITS.

WE cordially agree with our correspondent, *Chiaroscuro*, that it is highly improper that any member of the medical profession should suffer his portrait and biography to appear in what is practically a trade circular, more especially if "before going to press a proof of the biographical sketch be submitted" to the subject of the notice "for revisal."

M. D. Keily.—It is impossible to answer the question put by our correspondent, as the amount of knowledge acquired depends more upon the recipient than the channel through which it is conveyed. The following are the books officially recommended for study:—Animal Kingdom, by W. S. Dallas; Outlines of the Structure and Functions of the Animal Kingdom, by Rymer Jones, or Cours Elémentaire d'Histoire Naturelle, par Milne-Edwards; Lindley's School Botany; Lindley's Medical and Economic Botany; Henfrey's Elementary Course of Botany; Elements of Natural Philosophy, by Golding-Bird and C. Brooks; Physical Geography, by Mrs. Somerville.

Dr. James Wilson.—We are not aware of any such appointments.

Mr. C. J. E. Walkey.—We are compelled to decline the offer.

"A DISAGREEABLE DUTY."

To the Editor of THE LANCET.

SIR,—My complaint of a want of courtesy on the part of a house-surgeon at the London Hospital has evoked a reply from that official, which to me appears to have been written more as an insult than to refute the charge.

In his efforts at retaliation, Mr. Hingston displays a looseness of assertion which may one day lead him into some difficulty. Without the slightest foundation except his own ignorance or carelessness in reading the Register and Directory, he has thought fit to publicly assert that I am not what I represent myself to be.

Amongst other inaccuracies, he says, "Mr. Wise is not registered, and his name does not appear in the Medical Directory; and though he signs himself 'M.D.,' he can scarcely expect to be considered a brother professional."

The wickedness of publishing such a libel on a professional man in the leading medical journal is inexcusable, and not to be countenanced for one instant. I must call upon Mr. Hingston for an immediate and unequivocal apology for the unwarrantable statement he has thought fit to make. Should this not be forthcoming in your next issue, I shall be under the necessity of taking further steps in this matter.

I am, Sir, your obedient servant,

Shoreditch, Oct. 10th, 1882. ALFRED WISE, M.D.

Mr. Lafan (Cashel).—We think the complaint should be referred to the conductors of the paper in which the offending article appeared. It would be against our rule to interfere in the matter under the circumstances described.

Mr. Hargreaves (Armley).—We have no recollection of the communication.

Justice should read THE LANCET before he complains of omissions. He will find the opinion given on page 547.

"USE OF APOMORPHIA."

To the Editor of THE LANCET.

SIR,—In answer to your correspondent, "M.B.," I beg to quote as follows from a "Commentary on the B.P.," by Dr. Walter Smith, of Dublin University:—"Its most conspicuous effect is as an emetic of extraordinary power and rapidity; one-thirtieth to one-tenth of a grain of the hydrochlorate subcutaneously, or one-tenth to one-fourth by the mouth, will induce vomiting in a few minutes, painlessly and without subsequent nausea or prostration. Apomorphia offers special advantage in dealing with refractory children, insane people, or with adults in some cases of poisoning when coma, delirium, or spasm prevents the oral administration of emetics." I am, Sir, yours, &c.,

Oct. 2nd, 1882. T. C. D

M.A., M.B.—We agree with our correspondent that clinical details should be omitted from accounts of illness that appear in the lay press.

A Youngster and *F.R.C.S.*—Nothing could be gained by continuing the discussion. The hint given may have some effect.

C. Rubens.—We are unable to discern any particular merit in the appliance.

Aries has not enclosed his card.

"TREATMENT OF EPILEPSY."

To the Editor of THE LANCET.

SIR,—I am much indebted to Dr. Oscar Jennings and Mr. Wrixon for their letters in THE LANCET of Saturday last. Might I ask Dr. Jennings to kindly say into how many doses per diem the four tablespoonfuls of the bromide solution should be divided, and if one of the pills should be taken twice a day, or two of them once only.

I am, Sir, yours obediently,

Oct. 9th, 1882. ALPHA.

S. J. C.—Our correspondent's former letter must have been mislaid. The case is a painful one to both parents and practitioner. We think it is a case in which a certificate of the facts should have satisfied the registrar or the coroner without the formality of an inquest. There is no blame attaching to a practitioner who does not feel able to certify the cause of a death. But in such cases as the present the best course is to write a statement of the facts as far as they are known, and leave the responsibility of an investigation to the registrar. We do not doubt that the gratitude of the parents for attentive and successful treatment will survive other feelings.

Dr. P. O'Connell (Sioux City, Iowa, U.S.A.).—The Prix Saint-Paul, consisting of a sum of 25,000*f.*, will be given to anyone who first finds a cure for diphtheria which shall be recognised by the Academy as certain (*efficace et souverain*). The interest of this sum may be awarded to any whose researches on this subject may appear worthy of encouragement. Written memoirs must be either in French or Latin, but any printed works may be sent in competition. For the year 1883 essays are to be deposited at the Academy of Medicine before the 1st of July.

THE CONTAGIOUS DISEASES ACTS.

To the Editor of THE LANCET.

SIR,—Having seen the working of the Contagious Diseases Acts in different ports, I must differ from the opinion expressed in your article of Sept. 30th and your correspondent last week. The only Contagious Diseases Act that could be worked in a city or civil town would be that of 1864, improved and carried out by a health board, independent of municipal police, in a similar manner to the mode adopted for scarlet fever and small-pox. Opposition is always shown to police, when none is given to health officers. As a commencement, medical treatment and hospital support might be made from public funds for those suffering and voluntarily presenting themselves, who are more anxious for cure than is generally stated, in larger numbers, if not annoyed by the addresses of a certain class of visitors.

I am, Sir, yours obediently, H. HARKAN,

Craven-street, Strand, Oct. 9th, 1882. Deputy Inspector-Gen., R.N.

G. P. should inscribe his qualifications on his plate. The object of putting the initials or the name on a prescription is not to procure practice, but to supply a means of reference and a guarantee of good faith in the prescription.

Dr. J. Ashburton Thompson.—The official list has not yet reached us, but our rule is to print each pass-list as we receive it from the examining body.

Justice.—Undoubtedly C had a right to apply for the vacated appointment; but unless B's retirement was a matter of notoriety, he was not justified in canvassing before the resignation.

"THE USE OF THE FORCEPS IN MIDWIFERY."

To the Editor of THE LANCET.

SIR,—I am not at all addicted to the use of instruments where they can possibly be avoided; yet I find, on referring to my obstetric list, that of the last 400 cases attended by me, the forceps were used 12 times—i.e., 8 times in primiparæ and 4 times in multiparæ, or an average of about 1 in 33. I think it likely that half these cases might have been terminated without the use of forceps had I felt myself justified in exposing the poor women to several hours' further unnecessary agony; but I may say that I make it a rule of practice not to wait more than three hours when there is no advance in the second stage of labour.

I disapprove as much as anyone of meddlesome midwifery, and can scarcely believe that in a run of several hundred consecutive cases it can ever be necessary or desirable to employ the forceps in so many cases as 1 in 8—the proportion in which they are said to have been employed by the late Master of the Rotunda.

I am, Sir, yours faithfully,

Wood Green, Oct. 9th, 1882. B. A. RUGG.

SEVERAL letters on the subject of the Degrees of the Queen's University in Ireland, as well as other communications, are unavoidably left over. We shall try to find room for them next week.

Mr. Norris (Weston-super-Mare).—The announcement appeared in our issue of the 23rd ult.

Mr. C. P. Heap.—We cannot offer an opinion on the merits of the machine without having an opportunity of inspecting it.

THE LATE MR. CLOVER.

To the Editor of THE LANCET.

SIR,—In your very just obituary notice of my old friend Mr. Clover, of October 7th, p. 607, will you allow me to add that he certainly was present at the operation you refer to, and to say that Mr. (now Dr.) W. Squire administered ether.—I am, Sir, your obedient servant,

WILLIAM SQUIRE, M.D., &c.

Orchard-street, Portman-square, W.,

Oct. 9th, 1882.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Thin, London; Mr. Sampson Gamgee, Birmingham; Dr. Cobbold, London; Dr. Manson, Amoy; Mr. Dixey, London; Dr. Burney Yeo, London; Mr. C. Bader, London; Deputy Inspector-General Harkan; Dr. Easby, March; Dr. Thompson; Dr. Bampton; Dr. Jas. Wilson; Dr. Innes, Hull; Miss Calhoun; Dr. J. A. Bury, Manchester; Mr. Roe, Patricroft; Mr. Cowan, Birmingham; Dr. Norman Kerr, London; Dr. W. Squire, London; Mr. Isdell, London; Dr. Murray, Galashiels; Mr. Rugg; Mr. Heap; Dr. Pratt; Mr. German, West Bromwich; Mr. Hudson, Redruth; Mr. Hall White, London; Mr. L. S. Mackenzie, Bradford; Dr. Ryley, London; Dr. Mordey Douglas, Sunderland; Dr. Roberts, Manchester; Dr. Kelly, Taunton; Mr. Henderson Pounds, Snodland; Mr. Thomas, Brighton; Mr. Laffan, Cashel; Dr. Bloomfield, Exeter; Mr. Austin, London; Mr. Jennings; Rev. C. J. E. Walkley, Bonn; Mr. Frederick Treves, London; Mr. Wheeler, Ilfracombe; Mr. Mason, Liverpool; Dr. Geo. Johnson, London; Mr. Powell; Brigade-Surgeon Ferguson, Portsmouth; Dr. Cobbold, Earlswood; Messrs. Dawson and Co., Manchester; Mr. Canty, Liverpool; Dr. Maclagan, London; Mr. Roche, Belfast; Dr. Anderson, Newcastle-on-Tyne; Mr. Robinson, Sheffield; Mr. Lowe, Glen Armond; Mr. Maw, Bradford; Mr. Tillett, Cheltenham; Mr. Townsend, Exeter; Mr. Thompson; Mr. Saunder, Manchester; Dr. T. Cooke, London; Dr. Macadam, Edinburgh; Dr. Bush, Richmond; Mr. Sweeting, Fulham; Messrs. Macmillan and Co., Cambridge; Mr. Elliott, Carlisle; Mr. Walker, Doncaster; Mr. Hutton, London; Mr. Lloyd, Ilfracombe; Dr. Vance Young, Harewood; Dr. E. Haughton, Norwood; Dr. Maxwell; Mr. Canning, Hull; Mr. Mugford, London; Mr. Haxworth; Dr. T. S. Johnson, Canterbury; Medical; F.R.C.S.; Apomorphia; Pyrexia; S. J. C.; M.A., M.B.; Enquirer; G. P.; R. P.; Y. Y.; A Youngster; Tyro; Alpha; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Hunt, Dalston; Mr. Simpson, Liverpool; Mr. Jack, Hingham; Mr. Redfern, West Derby; Messrs. Nicholls and Son, Kingaland; Mr. Hayward, Manchester; Dr. Coombs, Castle Cary; Dr. Mossman, Twickenham; Mr. Wilson, Nottingham; Mr. Bencroft, Southampton; Mr. Tabaner, Wigan; Dr. Spence, Burntisland; Mr. Foulkes, Sheffield; Mr. Bigg, London; Mr. Pope, Bandon; Mr. Hughes, Llanengen; Mr. King, Lymington; Mr. Marsh, Stafford; Mr. Werkin, Worcester; Mr. White, London; Mr. Thacker, Richmond; Messrs. Corry and Co., Belfast; Dr. M'Carthy, Eastbourne; Mr. Moseley, Paddington; Mr. Hone, Ilminster; Dr. Oliphant, Pau; Mr. Groves, Dorchester; Mr. Davis, Churchingford; Mr. W. Armstrong, Allendale; Messrs. Bell and Co., Edinburgh; Dr. Clark, Bessbrook; Mr. Berks, Sheffield; Mr. Balmer, Hereford; Mr. Pentland, Edinburgh; Mr. Buckley, Canning-town; Miss Williams, Carshalton; Mr. Macfarlan, Newry; Mr. Williams, Oxford; T. J. C., Oldham; Medicus, Landore; A. M., Glasgow; Beta, Manchester; Medicus, Sunderland; V. M.; X.; G. F., Yeovil; Z.; Medicus, Haxby; Alpha, Fulham; Vade Mecum; M.D., Holborn; Dispenser, Mile-end; Medicus, Holloway; Lady Superintendent, Leicester Infirmary; Medicus, Leeds; H. W. G., Cardiff; Omega, Brentwood; H. N.; Medicus, Nottingham; Principal, Seaford; W., Sandown; M. Z.; Crito; A. B., Atherstone; W. B., Hastings; A. C. K., Chelmsford; H. J. H.; G. A., Tredegar; B. G. M.; A. B.; Surgeon, Rotherham; C. J. G., Breston; F. C., Camden-town; E. G., Watford; R. H. C., Hackney; Nemo; M. Q. C.; Matron, Egham; Nevis, Shrewsbury; O. O.; &c., &c.

Lancaster Guardian, Belfast Daily Post, Belfast News-letter, Northern Whig, Morning News, Birmingham Daily Mail, Barnet Press, Port Elizabeth Telegraph, &c., have been received.

Medical Diary for the ensuing Week.

Monday, Oct. 16.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Introductory Remarks by the President (Mr. Francis Mason).—Résumé of Fothergillian Prize Essay on Whooping-cough, by Dr. Dolan, Halifax.

Tuesday, Oct. 17.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. The following specimens will be shown:—Ulcer of the Duodenum; an Appearance of the Diaphragm in Rickets; Aneurisms in Young Persons; Double Obturator Hernia; Tricuspid Stenosis; Incipient Cystic Disease of Parovarium, &c.; Mediastinal Tumour in a Boy; Aneurism of Aorta; Ulceration of the Colon in Typhoid Fever; Cirrhosis of the Liver in an Infant; Injury to the Vertebral Column.

Wednesday, Oct. 18.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.

Thursday, Oct. 19.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.
HARVEIAN SOCIETY.—Mr. Pepper, "On Trepanning Mastoid Cells in the Adult."—Mr. G. Eastes, "On Physiological Rest in the Treatment of Medical Cases (concluded)."

Friday, Oct. 20.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

Saturday, Oct. 21.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M

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